Annual Report 2024

RESOLVE

AVR.

AVR Annual Report 2024

Resolve

Rob de Fluiter Balledux, CFO, and Yves Luca, CEO

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CEO Yves Luca and CFO Rob de Fluiter Balledux

After a year of determined efforts to recover from the devastation caused by the fire in Rozenburg, we were able to resume processing residual waste ourselves in October 2024. That was the focus point for the year 2024, in which everything was achieved through resolve. But everything else that had to be done, was also done, Yves Luca and Rob de Fluiter Balledux tell us.

To start with the most important: the first ovens at Rozenburg were back in operation on 1 October. A lot of people were surprised by that date.

Yves: 'It's true. There was some disbelief when we announced our plan. But it was our main focus: we will have three lines back in operation on 1 October. And we succeeded thanks to incredibly hard work. And most of all thanks to the commitment of the many people who were rooting for us. To start with our own people, but also clients, suppliers and authorities, and our own shareholders who immediately offered help and sent technical experts. We had fantastic support. Not temporary, but continuous. The fact that we were so determined and did what we promised we would, reinforced the confidence in us, winning us even more support. I believe that the open and honest attitude we have always had towards our business relations, and the clear course we followed, worked to our advantage in this case.'

Rob: 'We had two goals in mind: in addition to the start of the incineration lines on 1 October, we also had to make sure that we could claim from the insurance coverage. Given the extent of the damage and the accompanying financial interests, we knew that the insurers would need time to review the case thoroughly. First, an independent investigation had to take place before it could be established that this incident was covered.

There were many information rounds, interviews and follow-up questions. Due to the risk spreading for both our insurers and ourselves, we are insured with various parties in various countries, each of which had their own approach. We met every week with the insurers' experts, while the insurers closely followed the process. As early as the investigation phase, the insurers' experts told us they were impressed by our dynamic approach since they often see that such a major incident is followed by a certain paralysis. That was confirmation for us that we were on the right track. And when we heard that the damage was covered by the insurance policy, that felt like a milestone. The process with insurers has been exceptionally diligent and constructive. That's fine, because we knew that we would have to invest in restoring the installation and obviously needed the insurance money to be able to do so.'

How did you solve that financially in the meantime?

Rob: 'We began by making full use of the leeway we had within our own existing financing facilities. And we had a robust cash position. Our models showed that with those two things, we were able to bridge at least six months. Then, when in April 2024, we got confirmation that the insurance policy covered the damage, we could ask for advances from the insurers. Once they were sorted out, the financial situation was largely under control.'

Yves: 'We couldn't start spending money immediately, because we first had to have plans, and operations soon came up with one. Demolishing the existing energy hall and building a new one in its place wasn't a good idea. Firstly, because the investigation was still ongoing, and also because safe demolition would have taken a lot of time. So we made use of another suitable space on the site.'

How did staff and business relations deal with the situation?

Yves: 'All the managers visited their teams just days after the fire, to reassure them. One big worry was: where can all the waste go? We wanted to keep control of the waste flows and the long-term contracts, and we wanted to save our clients any hassle. A lot had to happen: approaching clients, organising financing and insurance plus coordinating the construction. Everyone took on tasks within their own discipline. Then you see experience, resolve, pride. As I said already, we had accumulated a lot of trust but the commitment of our people also got us a lot of support. That was the very best thing about the whole year for me.'

Rob: 'The goal of 1 October also generated a lot of internal dynamics too. Whereas one person was convinced that it was doable, another was more reticent. But they all put their shoulders to the wheel. With that goal in mind, we were also able to go public, meeting clients, authorities and financiers, because we had to demonstrate that we had good prospects, also to restore confidence. That's why we kept the relevant parties constantly updated about the progress.'

Yves: 'Yes, we were very open about everything. We have been as transparent as possible towards authorities: we said we need a year and then we can restart. We maintained an ongoing dialogue with stakeholders in the Rotterdam heat network and ensured continuity by operating gas-fired boilers. And a promise is a promise: by storing waste, we commit to taking it back. It took, and still takes, a huge amount of coordination. But there was also a positive side: hard work generates group feeling. It was clear to everyone: this is a crisis. And in such a situation, everyone rolls up their sleeves and you get solidarity and pride.'

Were there developments in 2024 that affected AVR?

Yves: 'Emissions of CO_2 and incinerating raw materials are matters for concern. They could be a dilemma. We choose to continue doing what we're good at, which is making waste incineration as useful as possible. At the same time, the incineration capacity is being restricted. Our motivation is to be the best in every aspect, and that includes socially responsible business practices and sustainability. We are going to apply the European sustainability rules from the CSRD, and if we convey our message that way, we will have earned our place in business and socially. Incineration will always be necessary. One dilemma is: what else do we do? By post-separating, we aim to extract more raw materials from the waste. But the framework for raw materials is geopolitical.

Due to the low oil price, there is a lot of cheap virgin plastic on the market. That should be taxed. Recyclers throughout all of Europe are under pressure. The question becomes: how do you safeguard synthetics as raw materials in the long term? But we're sticking to our focus so we can take up a stronger position in the future.'

Rob: 'Our industry is facing increasing challenges by way of legislation. First there was the tax on waste materials, which was later also applied to import, and then the tax on CO_2. The latter tax has now also suddenly been increased for companies such as AVR. There is a study ongoing, to decide whether Energy from Waste activities should be included in the EU-ETS regime for emissions trading. In addition, stricter requirements for the application of bottom ash are on the way. You can sometimes respond to legislation by investing,

as we are doing with the CO_2 capture plants, for example. However, that takes time, and we are not currently being given that time, thanks to the speed at which legislation is being pushed through.'

Yves: 'Another example is the problem with laughing gas cylinders. The government made the use of laughing gas illegal. Since then, the deposit system has ended and empty cylinders are dumped in residual waste. The cylinders explode during incineration, and we processors are faced with dangerous situations for our staff and disastrous damage to our ovens, and the ensuing high costs. The government offers no solution for the consequences of that decision to prohibit use. That hasn't been thought through.'

Have geopolitical developments had any impact?

Rob: 'Yes, on costs in particular. The war in Ukraine led to high energy prices which in turn led to an increase of inflation, as a result of which salaries have also risen. If companies go on to compensate for those increased salary costs with higher prices for their products and services, this in turn has an impact on the inflation. Naturally, such an inflation spiral is undesirable, but the risk of this has not completely disappeared.

Yves: 'It makes investing more difficult. We budgeted for a new CO_2 installation in 2022, but the costs are now much higher. We have to be more critical of investments. Restarting on 1 October was an absolute must for us, and the speed of that did involve extra expense but by being on time, we avoid other costs. Now we have to manage costs more firmly and our organisation. We have to do that properly.'

How are the final results for 2024 looking?

Rob: 'In 2023, we had the worst financial year ever, due to all the consequences of the fire at Rozenburg, but in terms of results, 2024 was luckily a very good year indeed. Naturally, the insurance payouts are a positive influence on the numbers, but that has already partly compensated for the loss in 2023. The refinancing was another important project that we successfully concluded in 2024. It was of course unfortunate, in terms of timing, that a large part of our financing expired precisely in December 2024. Thanks to the good collaboration with our shareholders and our financiers, we have been able to get 225 million euros in new financing from the market. We're very happy about that. An in other areas too, we've achieved good results. We used the stoppage of the Energy from Waste activities for large projects that we might otherwise have found difficult to do. The outflow of bottom ash has been moved, there is a new slag hall, major maintenance has been carried out on the bunker, the smokestacks have been renewed and prepared for our future CO_2 capture. Additionally, we have provided more training programmes for our employees than ever before.

Safety was to be a spearhead in 2024. What has been done in that area?

Yves: 'There has been much focus on that. We involved the entire organisation in working safely by having everyone walk compulsory safety observation rounds of the site. Even office staff have to do that now, at least six times a year. The closer someone works to operations, the more often they have to walk a round. We also made cyber security training compulsory. It's a growing threat so it demands attention.'

Has any attention also been paid to increasing sustainability?

Rob: 'We're getting ready to become compliant with the CSRD, the EU reporting directive, based on ESG. During a stakeholders day, we selected material themes that are relevant to both us and our stakeholders. They form the basis for our approach. As you can see in this 2024 Annual Report, the reactions have been enthusiastic. We recognise its importance. ESG isn't only about climate, it's also about continuity and financial sustainability. The one can't exist without the other. Everything is connected to and integrated into responsible running of our business that is in the middle of the transition surrounding climate and raw materials. That all comes together in this. That's why we're not developing a separate ESG strategy. We are of the opinion that it's much better to integrate this into our business strategy.'

How is 2025 looking to both of you?

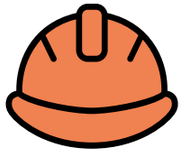
Yves: 'We're confident that we can operate according to plan. The operation needs calmness and continuity, so we're going to focus on that. Safety remains important in 2025 too. It won't be as dynamic a year as 2023 and 2024, but we hope that we'll be able to continue to count on our staff. It's also important to mention that our team at Duiven has produced excellent performances and given lots of support. We have a huge amount of respect for everyone's resilience and resolve, and would like to thank them all for that.'

Employees
(average FTEs)

+16

484

2023: 468



Safety
(IF rate)

+3.2

4.0

2023: 0.8

Sick leave
(percentage)

+0.9

6.3

2023: 5.4

EBITDA
(in millions of €)

+118.7

187.8

2023: 69.1

Net result
(in millions of €)

+184.3

88.0

2023: 99.7

* Figures are in ktonnes and rounded down in this list In 2024, we processed 0.24 ktonnes of hazardous waste.
** This refers to foreign waste that was in AVR's inventory when the fire broke out in September 2023.

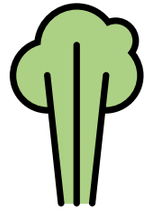
Quantity of waste processed
(ktonnes)

890

Household waste	203
Commercial waste	309
Hazardous waste	0 *
Imported waste	8 **
Subtotal residual waste for energy plant	**521**
Biomass: waste wood	135
Biomass: paper pulp	152
Waste water	74
Total residual waste processed	**882**

890

2023: 1,634



Total energy output
(Petajoules)

-2.2

3.4

2023: 5.6

Fossil CO_2 emissions in Scope 1
(ktonnes)

-266

290

2023: 556

Biogenic emissions
(ktonnes)

-469

614

2023: 1,083

February 2024

Demolition slag bridge

At Rozenburg, we completely changed the slag outflow by introducing a new slag conveyor belt system. We demolished the old slag outflow altogether that month. First we took the slag bridge apart, then we pulled down the towers. Once that was done, AVR's front garden looked totally different to what we were used to.

17 May 2024

Duiven lego installation at Munich IFAT!

ITAD, the industry organisation for waste processing plants in Germany, borrowed our Lego installation in May for the leading trade fair for environmental technologies - the Munich IFAT 2024. Our Lego installation demonstrates in a simple way which raw materials we salvage, how waste incineration works and how much energy that provides. The installation drew large crowds.

14 April 2024

Go-go-go AVR!

On a sunny Sunday, 14 April, AVR competed strongly with five teams in the 43rd edition of the NN Marathon Rotterdam, for a relay of a half or quarter marathon. They were cheered on by the army of Rotterdam supporters. One supporter's banner said: "AVR: Don't talk, run".

29 May 2024

Relax, refresh, recharge

After the fire, we started working incredibly hard to rebuild the plant. By way of thanking our staff for their commitment, flexibility and all the great work they did together, we gifted them a reusable AVR vacuum flask to use in their well-deserved coffee breaks.

AVR stakeholders day

AVR was keen to hear from stakeholders which material themes they found important and what they thought of our sustainable goals (ESG = Environmental, Social, Governance). A delegation of suppliers, clients and financiers and AVR staff were present on 6 June to discuss this. It was an insightful day.

6 June 2024

Roefel day in Duiven

On the annual Roefel Day, companies and organisations open their doors to children. AVR does too. 'Roefelen' is a Flemish word for 'browse'. On Roefel Day, children get to explore adult fields of work, are given information and the chance to do fun things. In Duiven, we welcomed 10 children who couldn't believe their eyes.

22 June 2024

13 June 2024

New website: working at AVR

On 13 June, we launched out new website 'WORKING AT AVR'. On it, we show potential new employees what AVR stands for and just how innovative and great we are. As well as all the job vacancies, complete with handy filter feature, the site contains stories from colleagues. We also describe the opportunities for personal and professional development that we offer, and explain how we contribute to a sustainable world.

July 2024

AVR forage forest

AVR owns a hectare of land close to the Duiven location. We joined up with the Milieuvrienden Duiven foundation (Duiven Friends of the Environment) to develop a forage forest there, to cultivate fruits, nuts and other edible plants. Many insects and birds live there, even the little owl and the kestrel. This is AVR's contribution to the local biodiversity.

August 2024

Demolition of container crane and press installations at OSSU

Utrecht transfer station (OSSU) switched from waste in containers to loose tipping of waste. So the container crane and four press installations were dismantled. The container crane was from 1977, and in those 47 years of faithful service, it moved more than 700,000 containers. A bit of the site is now available for modernisation. .

29 August 2024

AVR once more accredited as a training company

AVR Rozenburg has again been accredited as a training company: we may train students and colleagues in professional practice. That means we can work on the futures of young people who in turn give our company up-to-date knowledge and a fresh approach. All AVR locations are training companies: Rozenburg, Duiven and the vehicle department.

End September 2024

We started processing waste in Rozenburg again!

We put the steam-water cycle into operation by having the steam system of the new plant run through a closed circuit over our infrastructure. That allowed us to put Oven 1 into operation. It was a gigantic task, but together, we got the three processing lines operational. A huge achievement by all teams and colleagues!

28 November 2024

AVR staff drinks at Rozenburg

That Thursday, we toasted our colleagues and contractors who work at Rozenburg - drinks and snacks to thank them for all their great efforts during the restoration work. The Phoenix Project stopped briefly at a restaurant in Brielle before flying on to Phase 2!

November-December 2024

AVR roadshow: thank you!

In November and December 2024, the commercial team visited our clients, municipalities, provinces and other stakeholders with a very special waste container: not filled with waste, but with a message of thanks for their help after the fire. We're all looking forward to the future now with confidence!

Profile, mission, vision and strategy

AVR in brief

AVR specialises in the processing of various types of residual waste: household and commercial waste, waste water, paper pulp residue, waste wood and hazardous waste. AVR strives continuously to achieve the maximum recovery of energy, raw materials and other materials from this residual waste through effective, efficient and safe business operations. We ensure that plastics, drinks cartons, films and metals are recycled and minerals are used in building and road construction. By incinerating the rest of the residue, we supply steam, heat and electricity to our surrounding area. preventing the use of fossil fuels. We also capture CO_2 from our processes, which we then supply to the greenhouse horticultural sector. In doing so, AVR makes an important contribution towards the achievement of the Dutch and European climate and energy goals. And AVR does all of that with residual waste that other people often think is worthless.

AVR has two production facilities: Duiven and Rozenburg. Four transfer stations are located in The Hague, Utrecht and Rotterdam. The central location of the facilities is very convenient, both for the waste clients and the buyers of energy and raw materials. The residual waste is transported by water where possible and where that is impossible, by road. At the end of 2024, AVR employed a total of 520 people (484 FTEs).

Our mission: to create a clean world in which nothing is wasted

AVR gives residual waste streams—often seen as worthless—a valuable purpose by converting them into raw materials and energy. The aim is always to convert all the rest of the residue that nobody else can do anything with into something worthwhile, and with minimum impact on the environment. We believe our solution is the best one currently available. It's our raison d'être and our motivation: to create a clean world in which nothing is wasted. We and our proud employees work day in and day out to bring about positive change.

Our vision: Too good to waste

Vital raw materials are becoming increasingly scarce, while harmful greenhouse gas emissions continue to drive climate change. If we want this planet to be liveable for future generations we must make radical changes now. Changes like implementing a circular economy and an energy supply that is 100% renewable. The way we deal with residual waste is a key factor in making our planet more sustainable. The population of the world continues to increase, the global waste mountain keeps growing and in many countries, the majority of the residual waste is still dumped as landfill, which results in huge emissions of methane and other greenhouse gases.

AVR makes an important contribution towards reducing difficult residual waste streams: as experts in salvaging valuable streams from residual waste, we create new beginnings. In a world subject to many changes, that demands a flexible approach from AVR. With our sights on the future, we offer the best solutions today. At the same time, we ourselves are also constantly changing and adapting: to continue offering the best solutions for the day-to-day challenges facing our society. We research how things can be better, cleaner and more efficient, with no emissions. You can't have one without the other: we are striving for a natural balance between economy and ecology. And with that, we have not only a social solution for keeping the streets clean, but also the capacity to be a driving force for far-reaching and high-risk innovations.

All this goes for the residual waste that we process for our clients, and also, of course, for the waste we ourselves produce. Naturally, we aim to separate that as much as possible too, for recycling or reuse.

Our strategy

AVR has developed a strategy that will add substance to its mission and vision. The key elements are encapsulated in three pillars our organisation works on every day:

contracting of waste and residual waste, also in the long term

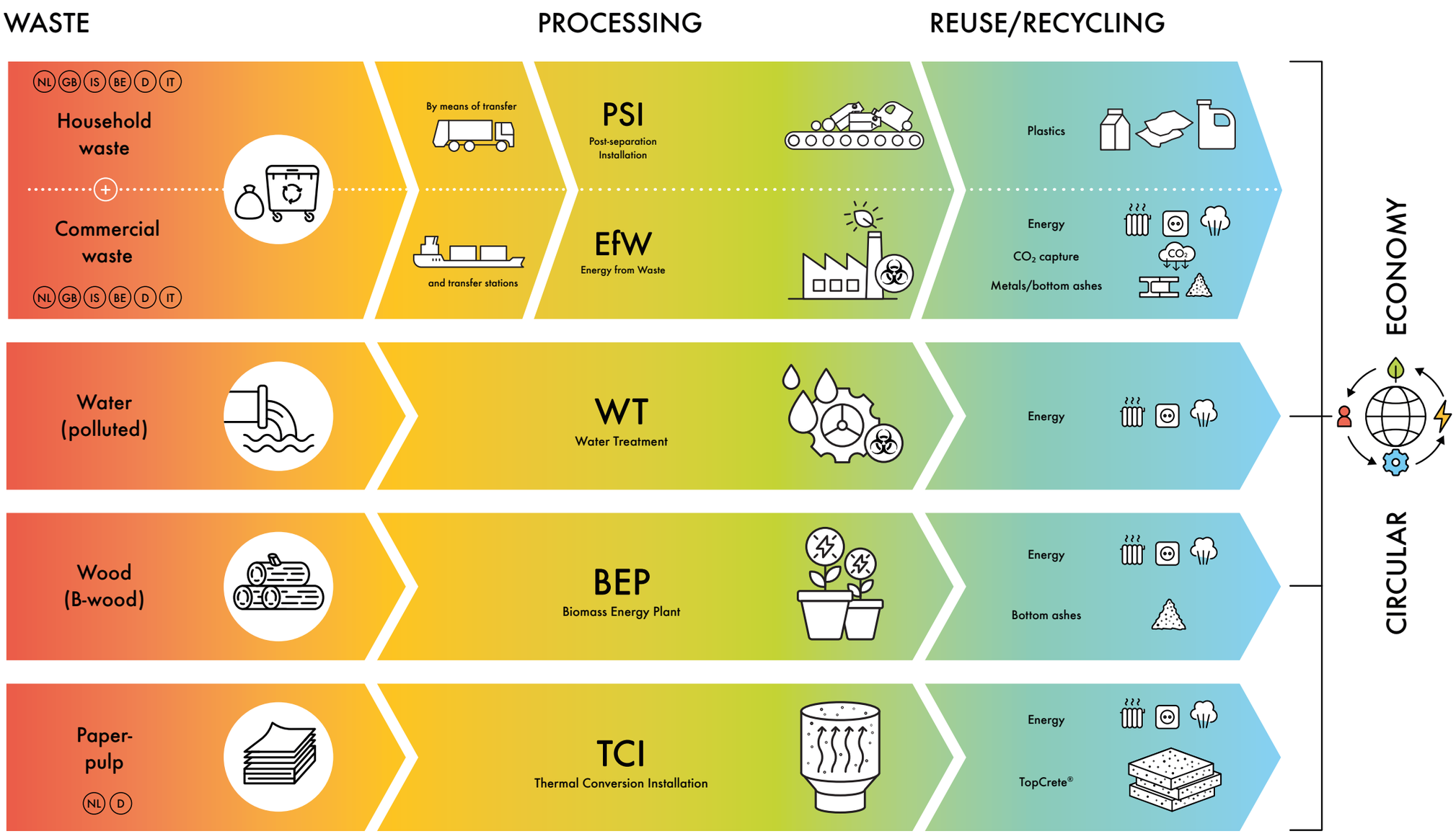
maintaining operational excellence and improving it where possible

maximising energy and raw material efficiency and minimising the CO_2 footprint and negative environmental impact.

The successful implementation of our strategy depends on our employees. They make the difference, in all three of the pillars. Which is why safety is paramount in everything we do. It's also important that our employees are healthy and energetic, can develop their potential and personal growth and can carry out their tasks to the very best of their ability. We achieve this by committing ourselves to their well-being.

AVR VALUE CHAIN

How we add value



Social developments

AVR operates in the context of the developments in society, both nationally and internationally. There are several trends and developments that influence our sector, our business operations and our results. We describe the main ones here. We explain in the chapters on results how AVR dealt with them and which results ensued.

Climate and environment

Reduction of CO_2
The fact that the climate is changing is becoming more clearly tangible and noticeable. Periods of drought and heat alternate with extreme precipitation and near or actual flooding.
In 2015, the Netherlands committed to the goals of the Paris Climate Accord and drew up a climate accord which states that CO_2 emissions must be 49% lower in 2030 than they were in 1990. The EU wants this to be 55%. The Dutch government has committed to this goal and, in 2023, raised its ambition to a 60% reduction in emissions by 2030. The current Schoof administration made no changes to this target after taking office in 2024. The goal for 2050 is 95% fewer emissions of greenhouse gases.

Nitrogen (NO_x)
Precipitation of nitrogen oxides is a threat to biodiversity. All sectors must contribute equally to the solution. There were plans in place for a reduction of nitrogen oxides, but the Cabinet has revoked them. Not only that but early in 2025, the Council of State issued two rulings on the dossier on nitrogen that affects many parties. Everyone is waiting anxiously for policy to break this impasse.

Often the measures to reduce CO_2 emissions lead to a reduction in NO_x emissions too. However, while CO_2 capture projects help reduce emissions, their construction phase can result in increased nitrogen emissions.

Shortage of raw materials
Sources of non-renewable raw materials (in particular fossil and mineral sources) are being increasingly exhausted. That forces us to recycle and reuse raw materials, preferably as high-grade as possible.

Reuse both prevents the need for extracting new raw materials and reduces CO_2 emissions.
The Netherlands has set a goal for 2030 of reducing their use of metals, minerals and fossil fuels by half that of 2014. The Nationaal Programma Circulaire Economie 2023-2030 includes the goal of being completely circular by 2050.

The LAP waste management plan (Landelijk Afvalbeheer Plan) will be replaced by the CMP circular materials plan (Circulaire Materialenplan) in 2025. This is expected to be implemented at the end of 2025. The plan includes a refining of the standards and conditions for the application of bottom ash. This presents a challenge for the industry, as the exact requirements for the application of the final product remain unclear.

Diminishing market for plastic recycling

Developments in the plastics market are in stark contrast to those mentioned above. The production of virgin plastic is so inexpensive due to relatively low oil prices that recycling has become hardly viable. This is reflected in the bankruptcies of recycling companies, which runs counter to the government's long-term recycling objectives (see the chapter Circular Economy).

Economy

Following the Russian invasion of Ukraine, prices of both energy, raw materials and additives rose rapidly. Early in 2024, the gas price seemed to have stabilised but in the last quarter of 2024 and the first months of 2025, it has risen sharply again, as a result of low gas reserves, colder winter weather and geopolitical uncertainty. This price is reflected in the cost prices of all products and services, which leads to inflation. The question is whether prices will remain affordable, and also whether enough energy will be available.

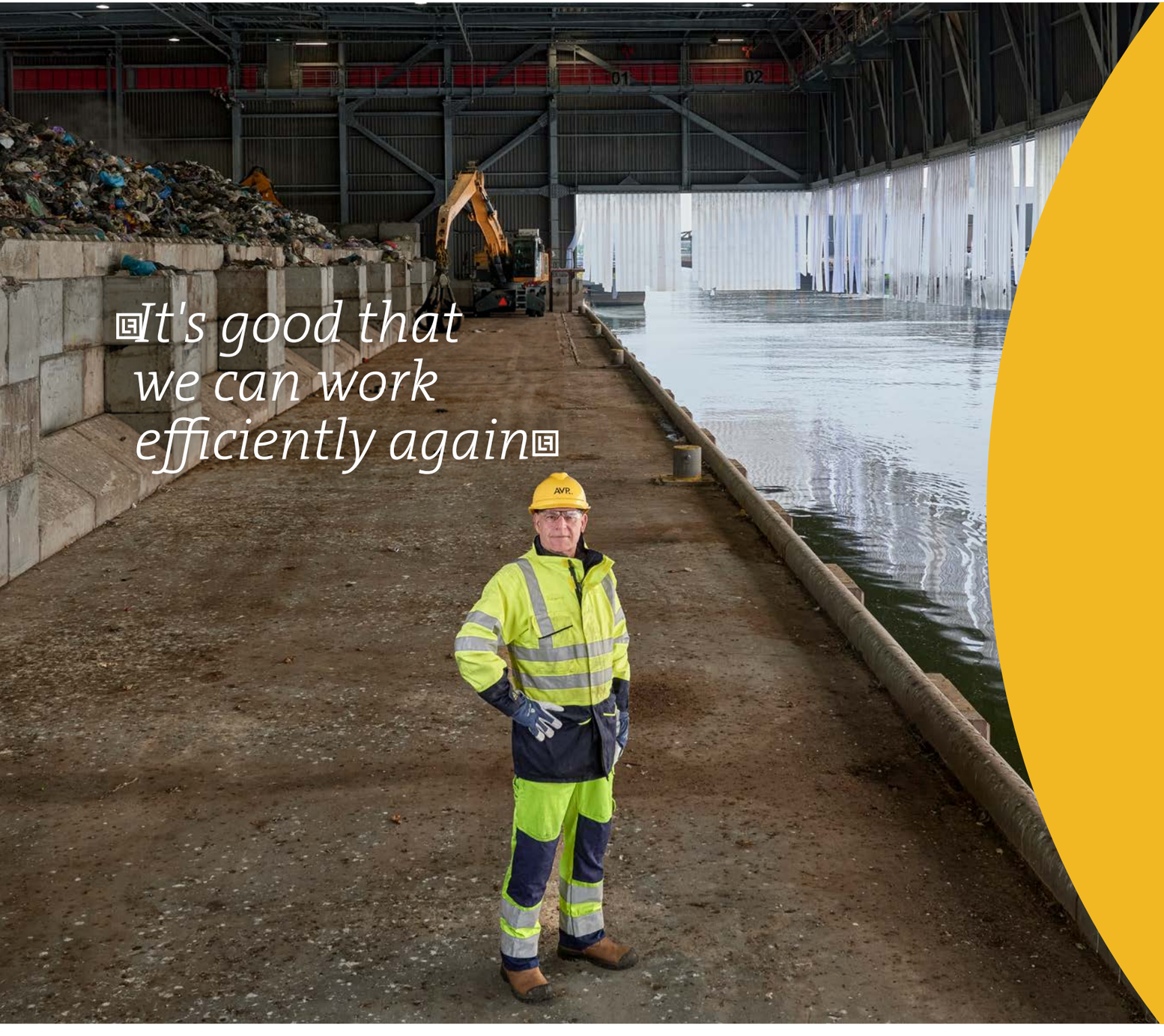
Due to the prevailing contract structure, waste processors are unable to fully pass on cost increases to their customers, and that puts pressure on the earning capacity.

Employment market

The shortages in the employment market have continued for some years now. There's a scarcity of technical and operational staff. One reason for that is that training programmes are delivering fewer practically trained workers. Add to that the fact that a significant percentage of the working population is retired, or soon will be. The length of time that staff stays with the same employer is getting shorter and shorter, so that when they move on, some of the investments in knowledge and skills are lost. In certain regions, such as De Botlek, companies are in stiff competition with each other in attracting qualified staff. It costs companies more effort to attract and retain staff.

Technology

Technology is developing at a rate of knots.
The impact of AI on the waste processing industry is still uncertain. Much will depend on whether technological advancements prove to be disruptive for this capital-intensive sector. That said, we do anticipate developments in waste separation technology, particularly through increased automation and robotics.



It's good that we can work efficiently again

Stefan Lubezuk
Team leader at OSSU Transfer & Transport, Utrecht

"At the Utrecht transfer station, the OSSU, waste from the province of Utrecht is collected for transport to Rozenburg. Up till now, the waste collection trucks were emptied and the waste went through press installations and into containers. The containers were hoisted onto the ship and unloaded again at Rozenburg.
That wasn't particularly efficient. In 2022, construction began on a new OSSU, while the old one was still in operation. The process was well thought-out and everything went smoothly. In May 2023, we switched to a new way of working: the waste collection trucks tip the waste out onto the floor of the new hall and the waste is transferred loose onto the ship. That has removed weak points from the process: the press installation, the forklift trucks and the crane.
A waste collection truck carries 9 tonnes of waste, and the press installation took 12 tonnes. So trucks had to switch containers and that meant minutes of waiting time. With almost a hundred trucks a day, that's a lot of waiting time. Using a mobile crane to fill the ship, the transfer goes really fast. Now that the containers no longer have to be loaded on board the ship, the load is not as heavy and there is no space wasted. The risks haven't so much disappeared as they're different.
There's no danger now of falling into the funnel but if more trucks are unloading at the same time, there's a greater risk of collisions.
It was all completely new for the people at OSSU, but they coped really well. But... then came September 2023 and the fire fire in Rozenburg. Our people had to start working completely differently yet again: the waste had to be taken in trailers to storage units instead by ship to Rozenburg. So more time lost, now due to traffic on the roads, and expensive transport. But everyone understood the necessity.
It demanded a huge amount of flexibility from our people.
They adapted fantastically. That can't be taken for granted. It was an enormous task for the commercial department too, getting in touch with transport companies and processors even during the fire.
They did a great job. The first ovens at Rozenburg have been in operation since October and in December, we'll resume shipping from the OSSU. It's good that we can work efficiently again."

Stakeholders, reporting and materiality

Our stakeholders

With our activities, we create value for our stakeholders and for society while keeping an eye on the needs of generations still to come. We have frequent contact with our stakeholders, both in the daily business routine and at particular moments. It's our way of safeguarding each other's interests and the possibilities of responding to those interests. The contact moments take place in all echelons of AVR and at the stakeholders' organisations.

We distinguish the following ten stakeholder groups:

- Employees
- Shareholders
- Waste clients
- Energy clients
- Suppliers
- Financiers
- Policy developers
- Licensing authorities/enforcement officials
- Politics
- Environment

AVR reporting policy

In recent years, we have further grown in aligning the major material topics with stakeholders and in the development of the KPIs for our annual report. We have taken steps towards an integrated annual report by way of stakeholder surveys and dialogue. Since then, we have made new progress towards meeting the EU directives for annual reports.

Latest developments early 2025

This annual report has been prepared before the publication of the Omnibus proposal. According to the Omnibus proposal, AVR will no longer have a CSRD and EU Taxonomy reporting obligation. Certain passages in the report are therefore still based on the previous situation in which we assumed that these reports would apply to AVR. In 2025, we will determine what these developments will mean for sustainability reporting within AVR.

Developments in regulations

CSRD

In 2021, the European Commission adopted the Corporate Sustainability Reporting Directive (CSRD) aimed at achieving more consistency in sustainability reporting between European companies. This included obligations for certain categories of businesses, which were weakened or removed in early 2025. Initially, AVR was expected to be required to report in accordance with the CSRD from the 2025 financial year onward. In preparation for that, we already classified our material themes on the basis of ESG (Environmental, Social and Governance). These elements are central to the CSRD and based on them, we measure and report our sustainable and ethical trading practices. We have drawn up a roadmap and established our ESG strategy. The roadmap contains milestones, several of which we reached in 2024.

Sustainability is not new for AVR: processing waste is after all a social necessity and has much common ground with environment. So, many of the requirements of the CSRD are nothing new to AVR, but rather concern a new format which the reporting has to adhere to. In 2023 and 2024, we actively shared out ESG strategy and obligations with our internal and external networks.

Double materiality

The double materiality analysis is central to the CSRD; it determines which sustainability information will be communicated in the Annual Report.

Double materiality means that the material themes are highlighted from two sides: on the one side, the risks and opportunities that come from outside the company and on the other, the impact the company has on people, environment and society.

EU Taxonomy

The CSRD prescribes that the CSRD and the EU Taxonomy should be reported together. The EU Taxonomy is a classification system with clear criteria that are in line with the EU climate and environment goals. Company activities in the area of sustainability can be grouped and assessed this way. There are "Taxonomy eligible activities" - the economic activities that are described in the EU Taxonomy - and "Taxonomy aligned activities - the economic activities that meet the technical screening criteria in the Taxonomy.

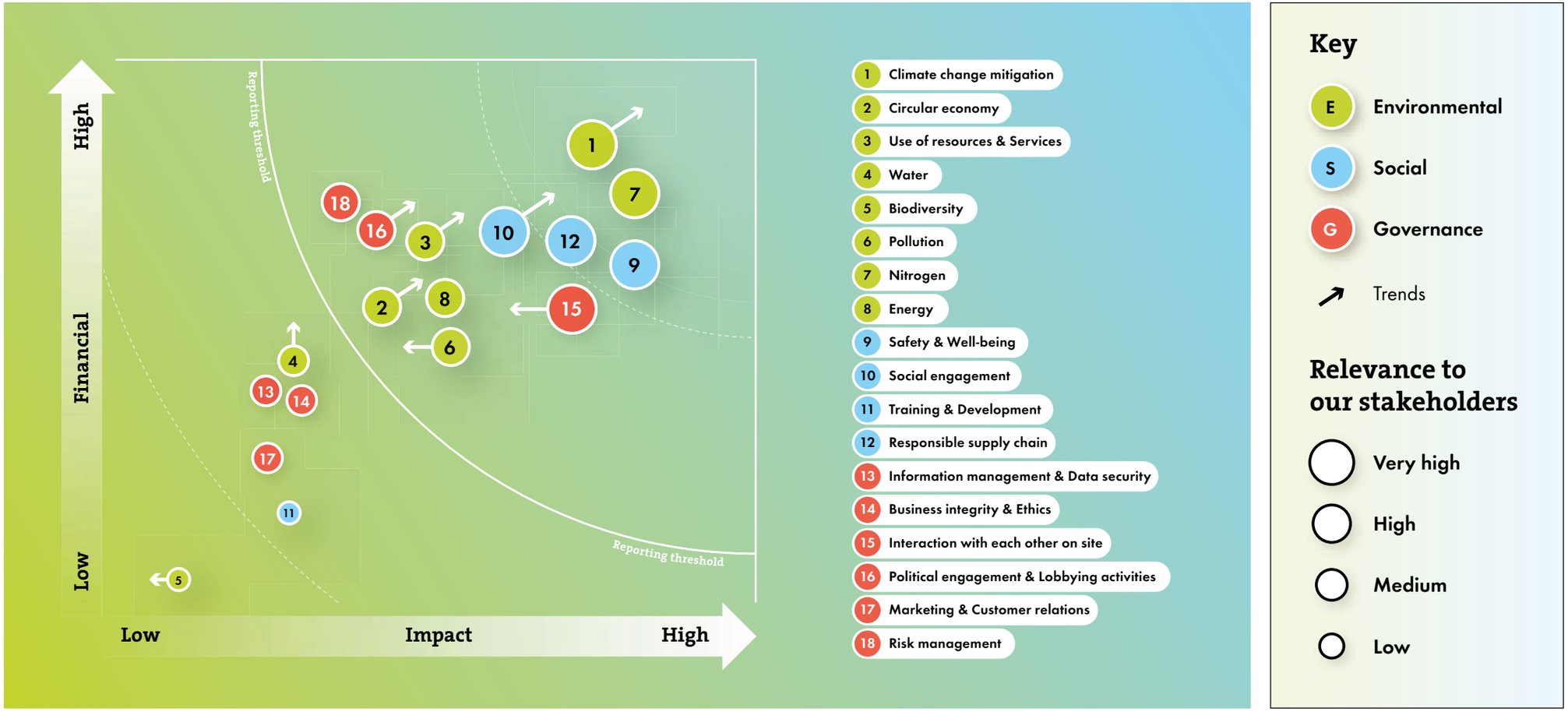
Materiality

Stakeholder Day at AVR
In June 2024, a stakeholders' day was held at AVR in Duiven, bringing together suppliers, waste clients, authorities, energy clients and financiers. They were questioned about the sustainable future of AVR. Our goal was to gain a better insight into which of AVR's material sustainability topics were deemed important by the external stakeholders and which, in their opinion, will be more important in the future, or less so. The same session was held with internal stakeholders, in particular management and the works council.

Double materiality analysis
Taking the results of both sessions, we have been able to establish and substantiate our topics based on the double materiality.

The final results were submitted for approval and feedback to the external and internal stakeholders. The main topics can be further divided into sub-headings; the categorisation in main and sub-headings was also presented to them.

Layout annual report
The chapters in this annual report correspond with our double materiality topics. A number of sub-headings are also dealt with in these chapters. There will be further explanation and analysis of the sub-headings in the 2025 Annual Report.



Out most important material themes

Of the 18 themes in the materiality analysis, 12 topics emerged as being so important that we are reporting on them.

Environmental

Theme 1 Climate Change Mitigation. In this category: direct CO_2 emissions, through stationary incineration for example (Scope 1), indirect CO_2 emissions in the chain, through the purchase of electricity (Scope 2) for example and other greenhouse gases such as methane.

Theme 2 Circular economy. In this category, we find other recycling and reuse of raw materials, and insight into and understanding of sending to landfill.

Theme 3 Use of resources and services. In this category: the dependence on, and use and efficiency of the raw materials purchased, and the purchasing process for and policy on, for example, goods and spare parts purchased.

Theme 6 Pollution. Here we find hazardous and extremely hazardous materials (HAZMAT) and other topics such as bottom ash, good housekeeping and cleaning the sites, manufacturers' responsibility and the quality of goods and products supplied.

Theme 7 Nitrogen. This concerns nitrogen emissions into the air (NO_x; NH_3) and water (Kjeldahl-N).

Theme 8 Energy. In this category, we find the use of and efficiency of energy. That doesn't concern the supply of energy (for that, see Theme 12, Responsible supply chain).

Social

Theme 9 Safety and well-being. This concerns accidents and fatal incidents as a result of work-related activities and the exposure to hazardous substances during work. This also concerns the general health and well-being of employees. Our stakeholders recommended we have a separate sustainability topic about the safety and well-being of non-employees (externals and contractors, for example) with the heading "Interaction with each other on site". See Theme 15.

Theme 10 Social engagement. In this category: sustainable employability, philanthropy (investment in community, for example, good causes, social responsibility), recruitment and social return, diversity and inclusiveness, ESG remuneration (link between compensation and reward for meeting ESG goals), retaining talent and organisational capacity (which relates to the workload). For financial year 2024, training and education are also included here. Although not a material topic, AVR really wants to report on this transparently. In addition, some data points and insight into training and education are required by the CSRD.

Theme 12 Responsible supply chain. Many topics of the value chain recur here. Take, for example, the responsibility for keeping streets clean, maintaining and investing in a reliable and resilient supply chain, steady supply of energy (the last two topics have become very relevant following the fire), steady input and supply of waste (feedstock supply), and the interaction with and management of competition.

Governance

Theme 15 Interaction with each other on site. This material topic reflects the many externals present on site at AVR. It's something that was important and increased after the fire, but remains important since then, given our social role. Take, for example, the frequent tours we give of our sites. Interaction with each other also includes the Code of Conduct and the social interaction and dialogue with our contractors, to safeguard that work activities take place safely and everyone can go home safe and sound at the end of the day.

Theme 16 Political engagement & lobbying activities. This is important to external stakeholders, due to it reflecting on and maintaining AVR's important reputation and social role. It includes:

- tranaparant advocacy,
- safeguarding interests within legislation,
- carrying on dialogue with authorities, and
- managing regulations and legislation.

Theme 18 Risk management. This concerns both the financials risks and other risk-related topics. That might include tax management, commodity prices and market volatility, management of calamities, financing, risk management and screening (the Enterprise Risk Assessment (IRA) and the Impacts, Risks and Opportunities (IRO), climate adaptation (the possibility for AVR of adapting to the changing climate and managing and mitigating any potential negative consequences).

Results of double materiality analysis

A number of the results of the double materiality analysis (DMA) are worth mentioning. Firstly, the stakeholders set great store by insight into our CO_2a nd nitrogen emissions. Incinerating waste is accompanied by emissions of CO_2a nd nitrogen and CO_2 emissions and nitrogen deposits are major social topics in the Netherlands. So it's hardly surprising that these are AVR's two most important material sustainability topics.
Secondly, the scores of three topics in the S Category (Social) are significant. "Safety and well-being" score high, which is to be expected in environments with a capital-intensive industry. More remarkable is the fact that "Social engagement" scores almost as high.
That category includes various sub-headings such as "Sustainable employability" and "Diversity and inclusiveness". The "Responsible supply chain" theme also score high, as a result of the fire at Rozenburg, where both resilience and stability in the value chain had to be safeguarded in the short and the long term. Lastly, the high score of "Interaction with each other on site" stands out. There have been many externals present at the Rozenburg location since the fire. Stakeholders set great store by good and safe interactions with each other on site.

The DMA score is reached by way of impacts, risks and opportunities (IRO). The IRO not only reflects stakeholders' feedback, it also ensures insights for mitigating and checking impacts and risks, and utilise opportunities. The DMA and the IRO form the basis for the ESG reporting for financial year 2025. In addition, there is annual update of the DMA and the IRO with the stakeholders. At the end of 2024, AVR began setting up the sequel to the DMA and the IRO - the Policies, Actions, Targets and Metrics (PATM).

AVR aims to give transparent reporting on its strategy and policy for the most important sustainability topics, and also on campaigns and goals.

Milestones

The DMA, IRO and PATM are theoretical and qualitative terms. In other areas too, AVR is preparing for the first sustainability reporting in line with the CSRD and EU Taxonomy. The following three major milestones were reached in 2024.

Firstly, we drew up a draft EU Taxonomy report. It offered insights into the "Taxonomy eligible activities" - the economic activities that are described in the EU Taxonomy - and "Taxonomy aligned activities - the economic activities that meet the technical screening criteria in the Taxonomy). On the basis of those insights, AVR decided to carry out an analysis of climate sensitivity and resilience. That analysis in turn offered insights into the risks if extreme weather conditions occur or climate change manifests itself. Completion is expected in the first quarter of 2025.

Secondly, ESG prescribes a variety of quantitative reporting requirements. We collected and opened up the majority of that quantitative data in 2024. In addition, existing KPIs and data have been reviewed or recalculated in line with the CSRD.

One example: in the CSRD, the number of hours worked also includes hours worked from home and business travel to client or supplier, something AVR didn't yet incorporate in this KPI.

Thirdly, sustainable initiatives have been carried out in a number of existing processes. For example, the Enterprise Risk Assessment has been fully integrated into the IRO. Also, bins have been placed at various locations for separating waste for recycling and plastic disposable beakers are a thing of the past.

Material themes, goals and KPIs

The themes that are most material for our stakeholders have been linked to AVR's strategic goals. One or more KPIs have been specified per theme. The KPIs make AVR's impact on these themes measurable. Every year, we assess whether the KPIs sufficiently reflect the effects or whether an addition or adjustment is required. The annual report is structured according to the ESG framework and its corresponding themes.

Terms

ESG	=	Environmental - Social - Governance
CSRD	=	Corporate Sustainability Reporting Directive
IRO	=	Impacts - Risks - Opportunities
PATM	=	Policies - Actions - Targets - Metrics
DMA	=	Double Materiality Analysis

After a year out of operation, starting up the ovens again went well

Ricardo de Groot
Crane operator at Rozenburg

"I came to AVR to grow and to work in shifts. That was in 2019. I applied for the job of working foreman but ended up being taken on as a crane operator, which I had been before. I also keep a watch on the lines and if I go outside, I do extra work such as the second operator's tasks or using the loader to keep the biomass plant supplied with waste wood, for example. The work is varied and nice. The fact that I'm still working there in these times when everyone is job-hopping, says enough. I wouldn't want to work anywhere else.
It's important to get the mix of waste just right if you want the boilers burning well. If not, you get slagging. And safety is important too. High up in the cabin of the crane, I see everything, so I can also see if it's all safe. For example, I see if someone's not wearing a helmet. If I see something that's out of line, I mention it, because that makes work safer.
Shortly after the fire, the bunker was still full of waste. It had to go to into storage. The Logistics department was understaffed for working the loader and baling waste. So I helped out. The days were long, but it was nice to be a part of it all and see a different side of the company. The bunker hadn't been empty since its construction in the 1970s, so it gave us a chance to renovate it. It was filled again before the boilers started up again in October.
By chance, I was the first person to put waste into the oven as it started up. We had mixed the waste well, with some dry stuff at the front to get the boiler burning well. It went well, even after a year-long stoppage. The chute to the boiler was rusty, which was briefly a problem, but it soon wore off. We stayed in close communication with the control room and the inspection panel that serves the boilers. After that, I cranked up other boilers too.
After the stoppage, they falter now and then, and the stored waste doesn't burn as well as we're used to. Thing sometimes go differently, all part of the job. As long as we keep an eye on safety."

ESG

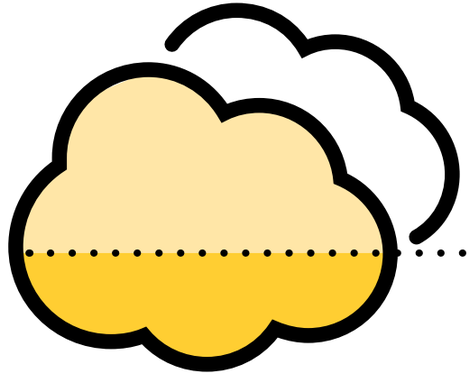
Environmental

- Climate change mitigation
- Energy
- Nitrogen
- Circular economy
- Use of resources and services
- Pollution

Climate change mitigation

Reducing emissions

After we have salvaged reusable or recyclable materials from the residual waste to process them, there is a remainder left. It contains something called calorific value. When you incinerate it, that calorific value is released in the form is energy, but also in CO_2. So emitting CO_2 is inherent in waste incineration. AVR has taken it upon itself to drastically reduce the CO_2 emissions. As a way of affirming our social contribution: to process waste from households and businesses with the lowest possible impact on the environment, and in doing so to combat climate change.



Emissions in Scope 1*
(ktonnes)

290 -266

2024: 290
2023: 556
2022: 881

Direct biogenic emissions outside the Scope 1 emissions
(ktonnes)

614 -469

2024: 614
2023: 1,083
2022: 1,346

Scope 1.1 emissions through AVR facilities
(ktonnes)

281

2024: 281
2023: not measured
2022: not measured

Scope 1.2 emissions company vehicles**
(ktonnes)

8.5

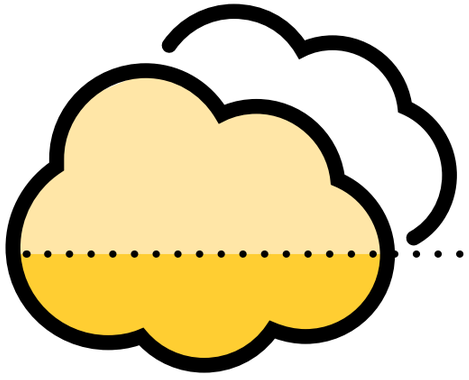
2024: 8.5
2023: not measured
2022: not measured

Regulated emissions trade regulations
(%)

32.9% +17.3

2024: 32.9%
2023: 15.56%
2022: 12.01%

* On the basis of the calorific value of the processed waste.
** Including transport by ship between waste transfer stations and rolling material ashore.



Emissions in Scope 2 (location)
(ktonnes)

13.2 +10.5

2024: 13.2
2023: 2.68
2022: not measured

CO_2-emissies avoided (energy)***
(ktonnes)

266 -209

2024: 266
2023: 475
2022: 619

CO_2-emissies avoided (recovered raw materials)***
(ktonnes)

79 -65

2024: 79
2023: 144
2022: 192

Emissions in Scope 2 (Market)
(ktonnes)

6.9 +6,9

2024: 6.9
2023: 0
2022: niet gemeten

*** On the basis of sector organisation Verenging Afvalbedrijven, obtained from EPE (Enterprises pour l'Environment).

AVR and the CO_2 emissions

AVR's CO_2 emissions are quite complex. We distinguish three different types of CO_2 emissions, the scopes as described in the Greenhouse Gas Protocol.

1. *Direct emissions – Scope 1*

The first are direct emissions, also called emissions in Scope 1. AVR makes a distinction between fossil emissions and direct biogenic emissions. Household waste is divided into part fossil and part biogenic. The Dutch Ministry of Economic Affairs and Climate makes this division every year. For example, it established for 2024 that 54% of the household or similar residual waste is of biogenic origin and 46% of fossil origin.
In the BEC and TCI installations, 100% of the waste processed is of biogenic origin—namely, waste wood and paper pulp residue, respectively. This is also verified with a sustainability certificate, the NTA8080. Any time AVR reports on the emissions in Scope 1, it always means fossil emissions. We report separately on our direct biogenic emissions. At present, only the fossil CO_2 emissions are affected by the government's national CO_2 levy and emission reduction goals.

Net Zero stands for the ambition companies have of operating climate neutrally. This is an ambition for AVR too. However, when determining whether Net Zero has been reached, AVR is dependent on legislation and decision by authorities about which CO_2 is or is not eligible for a CO_2r eduction and there is currently no clarity about that. At present at AVR, Net Zero equates to operating Net Zero to the no "fossil" CO_2 emissions. That's where our focus lies now.

2. *Indirect emissions: Scopes 2 and 3*

The second type of emissions is indirect emissions - the emissions in Scopes 2 and 3. Scope 2 contains all indirect emissions that occur through external production of electricity, heat, cooling and steam. Normally, Scope 2 is irrelevant at AVR - that's to say as long as we're not affected by fire:
AVR generates its own energy and as far as the energy purchased at, for example, the transfer stations, purchased grey energy is converted to green energy by way of Garanties van Oorsrong (origin guarantees). After all, AVR itself produces green energy.

AVR is reporting for the first time on the emissions in Scope 2 on the year 2024. However, in 2024, we were largely dependent on purchased energy. Due to the fire in Rozenburg, insufficient renewable electricity was generated to fully offset our electricity consumption. To bridge this gap, we purchased green certificates.

For the reporting on emissions in Scope 2, a distinction is made between location and market emissions –an important consideration for AVR. Scope 2 location emissions result from energy that is physically used, based on purchase from the grid. Market emissions in Scope 2 are formed by green measures or compensation for purchased energy. AVR purchases only electricity from the grid; we generate steam and heat ourselves. This was also the case with the temporary emergency systems after the fire at Rozenburg.

It's AVR's ambition to convert all purchased electricity to green electricity. That's made possible by the fact that our own electricity is sustainably generated and certified as such.

Emissions in Scope 3 are all other indirect emissions. That might include the trucks that pick up the waste and bring it to AVR. The CO_2 emissions from those trucks fall within Scope 3, as do the emissions from the production of the steel that we need for the new turbines. In that process, CO_2 is emitted elsewhere and the end product installed in AVR's turbine hall. AVR will be required to report for the first time on emissions in Scope 3 for the year 2026. Given the magnitude of indirect emissions, making them transparent is a huge task for many companies. That goes for AVR too.

We use fossil fuels for stationary incineration, such as natural gas and heating oil. Our own rolling material and our vehicles use run on diesel. Those emissions fall into Scope 1. But the diesel for hired rolling material falls into Scope 3.

3. *Remaining greenhouse gas emissions*

The third type includes all other greenhouse gas emissions. They are calculated in CO_2 equivalents. Remaining greenhouse gases are emitted in limited volumes compared to CO_2. The best-known of these emissions are methane, laughing gas and refrigerants. Methane is mainly released during lengthy storage of biogenic waste, such as at landfills. Methane is not constantly measured at AVR: after all, the aim is to incinerate waste, not store it. Laughing gas is released during incineration of specific kinds of waste. Refrigerants are occasionally released when they are replaced in cooling and air-conditioning units. For 2025, AVR will report in more detail on the emissions of the remaining greenhouse gases in line with the CSRD.

Ambitions for reduction of CO_2

We have outlined a strategy, with roadmap, for reduction of CO_2 emissions, up to at least 2030, with a view to 2050. The roadmap outlines our reduction goals and how we are working on them.

In 2024, the CO_2 emissions were 281 ktonnes in direct fossil emissions and 614 ktonnes in direct biogenic emissions. The CO_2 emissions are significantly lower than in previous years. This is largely due to the fire, which meant that the incineration lines were out of operation till the beginning of October.

Our strategy means we will be able to reduce our fossil emissions by roughly 70% by 2030, compared to the established baseline between 2014 and 2020 - that means from 890 ktonnes of direct fossil CO_2 emissions to 290 ktonnes. We will achieve this largely through the extra CO_2 capture installation to be built in Duiven and the large-scale one to be constructed at Rozenburg.

We will then be dependent on the realisation of the offshore transport and storage structure Aramis, expected to be operational in 2029, for the storage (CCS, carbon capture and storage). There is also the capacity for realising a negative CO_2 footprint (that's to say removing more than we produce). Changes in regulations are needed for that, such as extending the awarding of negative CO_2 emissions to include CO_2 that is captured by biomass plants (waste) and the acknowledgement of useful application of CO_2 (CCU, carbon capture and usage).

Emissions as a result of the fire

The consequences of the fire meant that AVR could not produce as much green energy through the processing of residual waste. Despite that, our processing plants and the transfer stations at Rotterdam, The Hague and Utrecht operated as much as possible on the sustainable electricity production from the biomass energy plant (BEC) at Rozenburg and from the AVR installations at Duiven. For the energy taken from the public electricity grid, AVR deployed guarantees of origin (GvOs) to make it green. The purpose of GvOs is to establish the sustainable origin of energy supplied.

During the fire and the ensuing restoration work, AVR was forced to deploy various emergency power generators to temporarily provide electricity. Those generators run on diesel and that consumption increased the Scope 1 fossil emissions at Rozenburg. The extra fossil CO_2 emissions resulting from the use of the emergency power generators was limited, compared to the normal fossil emissions that result from processing waste.

Reducing emissions in the WT

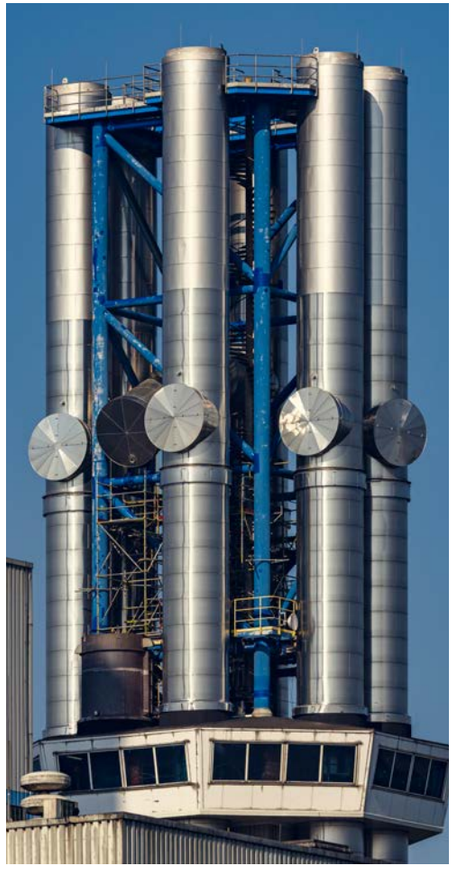
In our water purification plant (Water Treatment, WT), we processed the watery salt-laden waste streams for two chemical companies. Since the first quarter of 2024, however, we have ceased processing wastewater for one of these companies. By contrast, the other company renewed the processing contract for multiple years at the end of 2024. We have reached agreements with the other client about researching alternative processing techniques, inside the contract duration, the main goal being a pronounced reduction in the fossil CO_2 emissions and a phasing out of the use of natural gas as a fuel.

Lower emissions through fire/restoration

Fossil CO_2 emissions were lower in 2024 than in previous years. That can be completely traced back to the lower throughput of waste and the stoppage of the installations. Supplies of energy in the form of steam, district heat and electricity were lower than those from before the fire.

CO_2 capture installation

At our Duiven location, we capture CO_2 from the flue gases generated by residual waste combustion. There was a lot of focus on modifications to the installation for that in 2024. From the beginning of the year, the entire software package of the CO_2 installation was redefined to give us a better grasp on its behaviour and allow us to be able to intervene faster in the case of disruptions in the process.
In addition, certain parts which are susceptible to wear were manufactured in higher-quality materials than the original factory design. That way, we aim to reduce the frequency of preventive maintenance and with that, increase the availability. We also started looking into the possibilities of being allowed to apply the CO_2 produced at Duiven in foodstuffs (food-grade CO_2). We intend to further develop this exploratory study in 2025.



We have been working for quite some time on the development of two new CO_2 capture installations: a second one at Duiven, larger than the current one, and a large-scale on at Rozenburg. In 2023, AVR was granted the environmental permit for the realisation of the installation at Rozenburg, which will capture around 440 ktonnes of CO_2 a year. Of the captured CO_2, 50% will be used as growth enhancer in the nearby greenhouse horticulture area, as already happens now (CCU). OCAP organises the supply to the greenhouses through an already existing special pipeline. The other 50% will be permanently stored in the near future in empty gas fields under the North Sea (CCS). The latter will be dealt with by Aramis, that supplies the necessary offshore transport and storage infrastructure (see below). AVR will make use of Porthos infrastructure for the onshore transport (again, see below).

We started what's known as the front-end engineering and design phase (FEED) for the development of the installation at Rozenburg in 2024. During this research, it's important to get some certainty about the magnitude of the investment and operating costs, such as those for the use of chemical substances and of specific energy consumption, about the emissions and the site occupation. The outcome of this research will determine our definitive investment decision, expected at the end of 2025. Our aim is to have the CO_2 capture installation fully operational in 2028.

After the fire, the smokestacks of the lines of the waste incineration installation were replaced and fitted with blind plates (T-connectors) to which the CO_2 capture installation will be connected in due time.

The development of the second CO_2 capture installation at Duiven is awaiting the necessary permits and further improvement of the business case (see below).

Progress Porthos and Aramis

The construction of Porthos, the infrastructure needed for the transport and storage of CO_2 on the initiative of Havenbedrijf Rotterdam, Gasunie en EBN (Energie Beheer Nederland), is in full swing. The start is expected in 2026.

Aramis is a public-private collaboration between the two state companies Energie Beheer Nederland (EBN) and the Nederlandse Gasunie, and private parties TotalEnergies and Shell. Together, they leverage their combined technical expertise, experience, and CO_2 knowledge.

As far back as 2022, we were awarded multiple SDE++ subsidies for our CCU- and CCS projects. Since then, the projected costs of transport and storage of CO_2 have risen substantially compared to the amount the subsidiser based their calculations on at the time. In addition, the investment costs far exceed the earlier projections due to the high inflation in recent years. That puts pressure on the various business cases for CCS projects in the Netherlands, including those of AVR. The Dutch Ministry of Climate Policy and Green Growth has acknowledged this issue and set up a joint task force for it, with various market parties from the Aramis value chain.

The goal is to chart the risks for prompt realisation of the broader value chain (including industrial parties) and research possible public and private measures. Public measures focus on whatever the government can do, in the context of its climate and industrial policy, to support the value chain. Examples of that are the acceleration of permit processes and support of the industrial parties that were the first to commit.
Outcomes and possible public supporting measures are expected in the Spring Memorandum of 2025. Aramis expects to make a definitive investment decision at the end of 2025.

Reducing our own CO_2 emissions

We also want to reduce the CO_2 emissions not directly related to our plants. We're doing that by continuing to make our vehicle fleet more sustainable. We've increased our budgets for employees wanting to order an electric lease car, to make that choice more attractive. We had planned to expand the charging facilities for electric cars in 2024, but due to the fire, that wasn't possible since we had to divert to an external car park without charging facilities. In 2025, we will restart the research into electric transport by ship. There are already detailed plans for this, but they were temporarily halted due to the fire.

CO_2 tax

On 17 September 2024, the government presented the State Budget 2025 and the 2025 Tax Plan. The Tax Plan proposes a raise in the CO_2 tax for specific Dutch incineration plants. That came as a surprise, given that the previous Cabinet reversed the proposed increase in the rate of CO_2 tax earlier in 2024. The tightening of the existing CO_2 tax regulation is intended to further reduce the fossil CO_2 emissions of Dutch incineration plants by 2030. That is to be achieved through an accelerated and greater lowering of the dispensation rights (exempting the industry from CO_2 tax for a percentage of the emissions).

The proposed changes to the CO_2 tax will have a substantial impact on the tax to be paid. Based on the current CO_2 tax regulation and rates (price level 2024), the CO_2 tax is estimated at an average of 19 euros per tonne of processed waste in 2030. On the basis of the proposed tightening, the CO_2 tax will rise to an average of more than 40 euros per tonne of processed waste by 2030. This tightening of regulations doubles the CO_2 reduction target for Dutch waste incineration plants to approximately 80% of historical emissions. For other industries, this reduction is around 40%. The waste industry has protested against this tightening, but that has not led to any amendment to the plans. The subject will be on the agenda again in the Cabinet's spring decision-making process in 2025. If the plans go ahead, they will take effect in 2026.

Waste processing plants are still exempt from the EU ETS emission trading system. However, the European Commission is looking into whether this is feasible and desirable. The study will be completed in 2026. Until then, the national CO_2 tax applies to (only) Dutch waste processing plants.

There's nothing nicer than optimising and improving

Hugo Middelkamp
Senior Project Manager CCU/S Duiven

"Here, at Duiven, we have an installation that captures CO_2 from the flue gases from the waste incineration. It's in operation from April to October, when the greenhouse horticulture sector uses the CO_2 to enhance plant growth. We have received a subsidy commitment for another such installation and we're currently working hard on that. There will be one at Rozenburg too. In addition to its intended applications, a portion of the CO_2 captured by these two new installations will soon be stored in an empty gas field beneath the seabed. The Aramis Project will be running that.

As a mechanical engineer, I used to be more a process person, now I'm more an organiser. I organise everything around the new installation at Duiven, for what I call Project CO2-2, since it will be the second such installation here. It all started in 2021 with preparations for the environmental permit. The pre-design and pre-engineering phases came in 2022. On the basis of those, you find out what you're going to build, which requirements it has to meet and what you have to contract out. Our experiences with the first capture installation were also incorporated into the process calculations and 3D models we made.

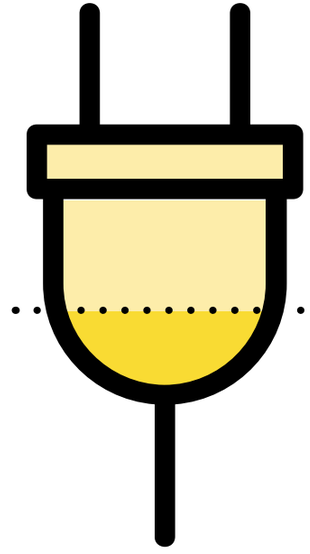
In 2023, we started on completion of the first part of the contracting. That ran until the summer of 2024. It means a lot of emailing and looking at documents, holding technical sessions and joining the Sales department in inviting suppliers for an info session. We studied the paperwork they subsequently submitted and got answers to our questions. We discussed and assessed offers until the summer. That was all going on at the same time that everyone at Rozenburg was busy with the fire, I like organisation, but I also like process technique. There's nothing nicer than optimising and improving. So I got involved in the process too. It's in my nature, I just have a lot of drive. I'll stay involved in this installation as long as the contracting phase is ongoing. Other people will take on the realisation later.

We had a flying start but we can't begin construction until we get the permit. It's been delayed due to a shortage of capacity at the competent authority. Aramis has also been delayed. We hope we can start building soon."

Energy

Renewable energy from residual waste

We produce renewable energy through the processing of paper pulp residue and waste wood. From the residual waste that is delivered to AVR in Rozenburg, we separate as many materials as possible for reuse or recycling. We incinerate the rest. This chapter highlights how AVR maximises energy efficiency - producing as much energy as possible from the least amount of fuel. From the biogenic part of the household waste, we produce sustainable electricity, heat and steam. We supply that energy to our surroundings and to heating networks. That way, we make optimum use of all the waste.



Energy output (PJ*)

3.4 -2.2

2024: 3.4
2023: 5.6
2022: 7.8

Biogenic part (%)

68% +10

2024: 68%
2023: 58%
2022: 55%

Energy output (only biogenic) (PJ*)

2.3 -1.0

2024: 2.3
2023: 3.3
2022: 4.3

Energy output (only heat) (PJ*)

2.5 -1.2

2024: 2.5
2023: 3.7
2022: 4.9

Energy output (only steam) (PJ*)

0.6 - 0.1

2024: 0.6
2023: 0.7
2022: 1.1

Energy output (only electricity) (PJ*)

0.3 -1.0

2024: 0.3
2023: 1.3
2022: 1.9

* 1 PJ (1 Petajoule) is equal to 277.78 million kWh. And if you were to generate heat with natural gas, 31.6 million m^3 of natural gas would be needed to generate 1 PJ.

Structure of the energy supply

The fire at the Rozenburg location on 21 September 2023 caused severe damage to the infrastructure in the energy hall. Among the things that were badly damaged or destroyed completely were the central process control systems, electricity distribution and control apparatus at medium voltage level (3-10-25 kV), transformers, high and low pressure steam distributors and four steam turbines. The internal energy supply stalled, as did our production.

Immediately after the fire, we launched the Phoenix recovery programme. The goal of the first phase of Phoenix was to restart the primary process, including the processing of residual waste and the commissioning of unaffected processing facilities such as the post-separation installation (NSI), the biomass energy plant (BEC), and the thermal water treatment facility (WT). In the first three quarters of 2024, the energy production remained limited to the extraction of industrial residual heat from the WT and to process steam, electricity and district heat from the biomass plant. In addition, we put three natural gas emergency boilers into operation at our location, in collaboration with Warmtebedrijf Rotterdam (a part of Vattenfall) to secure some of the heat supply in Rotterdam. During that period, there was a lot of coordination with our steam and heat clients about the progress of Phoenix.

In the last quarter of 2024, the Rozenburg location was restarted in phases and six of the seven incineration lines were able to once again fully produce process steam and district heat. We were also able to resume the heat supply to Rotterdam. That took place in careful coordination with the whole Rotterdam heat chain.

As of the first quarter of 2025, all seven incineration lines are fully operational again. The natural gas emergency boilers supplied Warmtebedrijf Rotterdam with heat from February through September 2024. After the restart of the incineration lines, the boilers were taken out of operation, bringing the use of natural gas back to zero. Since we were able to resume the supply of heat produced by the incineration lines, the use of gas-fired auxiliary boilers and heat produced by a conventional electricity plant in the Rotterdam heat chain has returned to its pre-fire level.

Due to the severe damage to the turbines and the energy hall, as established by the experts we consulted, AVR management decided to replace the steam turbines and build a new turbine hall. Two turbines were ordered in 2024 for district heat. The year 2025 will centre around the construction and equipping of the new turbine hall. In the meantime, we are realising a limited electricity production with the BEC, mainly for our own use.

ISO 50001

AVR has ISO 50001 certification, the healthy energy management system. In 2024, we charted our significant energy consumers at installation level. We had done that previously already done that at location level. Charting this makes it easier to monitor consumption and adjust tailored energy conservation policy. An external audit is scheduled for recertification in 2025. Moreover, we are now extensively using the processes outlined in our ISO 5000 handbook to guide the selection of our new turbine configurations.

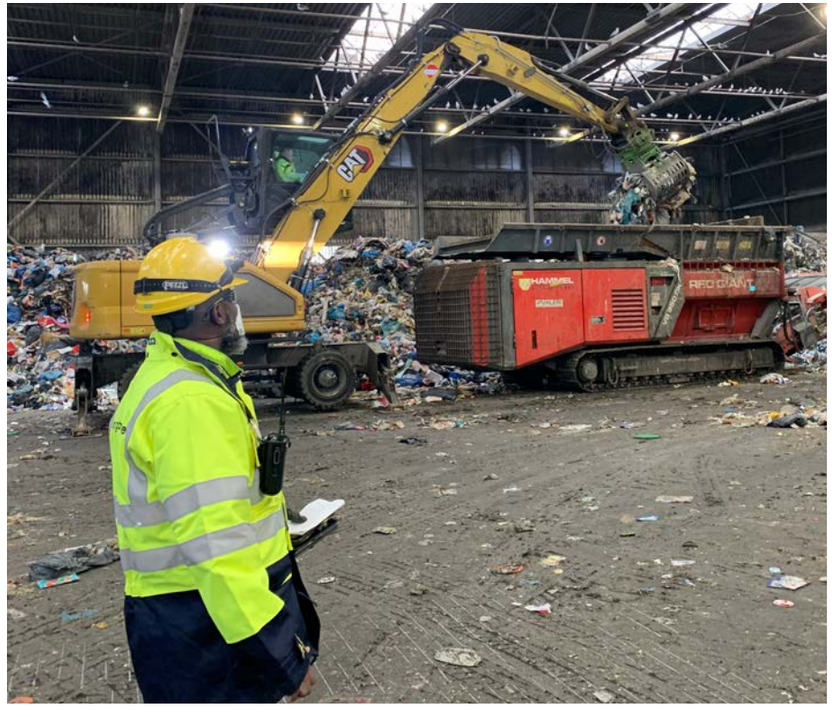
Healthy quality management system NT A8080

AVR uses the healthy quality management system NT A8080. That's an approved format for the implementation of the REDII (Renewable Energy Directive II). It enables verification of the origin of streams. NT A8080 verifies that biomass streams to our BEC and TCI have been sustainably obtained and that they don't come from illegal logging, for example.

Property rights to heating networks

There has been discussion for some time about whether heating networks should be public or private property, and this is temporarily blocking the development of new heating networks.

Energy companies Eneco and Vattenfall, to which AVR supplies district heat, announced that they will not be developing new heating networks for the time being. The uncertainty surrounding the ownership, combined with the tariffs that are allowed to be taxed, means that those parties have too little certainty about potential returns. Public parties, such as municipalities, EBN and regional grid operators, are taking on the development of new heating networks. Uncertainty about returns on investments for initiators of new heating networks and mistrust about the level of tariffs on the part of affiliated consumers are creating a turbulent situation for further development.



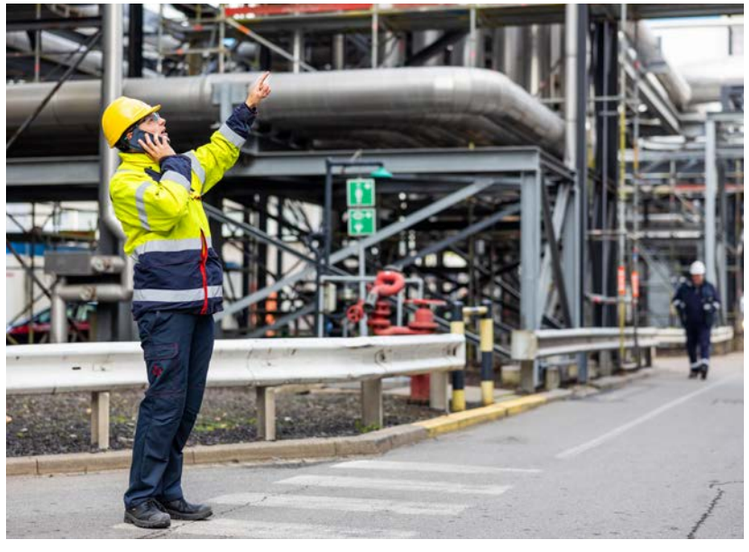
Tailored agreements

Before the summer of 2024, AVR collaborated on the exploration of tailored agreements for waste incineration plants. In line with the 2022 Coalition Agreement, these agreements are made with the 20 largest industrial emitters in the Netherlands, including four waste incineration plants like that of AVR. During those talks, AVR gave background information on the ongoing and planned initiatives: capture of CO_2 for application or storage (CCUS) and plans for extra reduction through additional capture, expansion of steam and heat supplies, reduction of NOx emissions and expansion of the salvage of raw materials from incoming waste streams and bottom ash. In the meantime, we have been invited to join talks on tailored agreements.

AVR was unpleasantly surprised to see that while the exploration of the tailored agreements was still ongoing, a severe increase in the national CO_2 tax specifically for waste incineration plants (AVIs) was announced in the taxation plan for 2025. This significantly restricts the prospects for action for our sector, since it will result in initiatives being mainly aimed at reductions of Scope 1 emissions as an instrument for risk mitigation of those extra taxes, while reductions in the chain, such as application or storage of CO_2 and salvage of materials barely count, or don't count at all. (See also Page 38, Climate change mitigation.)

Expansion of NetVerder steam network

In November 2023, AVR entered into contracts for the further expansion of the NetVerder communal steam network in De Botlek. This allows industrial partners that use steam for their processes to cut back on their annual natural gas consumption by 50 million m^3, reduce CO_2 emissions by 100 ktonnes and NOx emissies by 40 ktonnes. The first pile for the expansion was driven on 4 December 2024. These new clients are expected to purchase the first steam in the first quarter of 2026.



WarmtelinQ

WarmtelinQ is the name of the underground pipeline that will enable heat from the port of Rotterdam to be transported to heat homes and businesses in the province of Zuid-Holland. Work by Gasunie on construction of Warmtelinq is in full swing. The pipeline will run from the port of Rotterdam to The Hague, by way of Vlaardingen. AVR will be supplying some of the heat, through its partner Eneco, from 2026. The pipeline will be extended to Leiden and from 2028, part of the heat will be able to be transported on to Leiden.

Municipality initiatives

AVR is in talks with municipalities near the Duiven location on concrete implementation of the heating transition plans. One municipality is considering setting up its own heating company and procuring some of the heat from AVR. We're in talks about that with all stakeholders, including Vattenfall.

Consequences of grid congestion

A large part of the Dutch electricity grid, at both regional and national level, is facing congestion, or shortage of transmission capacity. At AVR'S Duiven and Rozenburg locations, regional grid operators Liander and Stedin and national high-voltage grid operator TenneT have announced transmission restrictions in the national electricity grid above that. For AVR, that means that in the case of calamities in our own production, there will be limits to the electrical capacity that we can get from the grid. Temporary or permanent transmission restrictions may also be imposed in future on the export of the electricity produced. This is most undesirable.

AVR is aware that the grid operators are facing significant challenges and that realisation of expansion requests is pretty much impossible in the short term. Which is why we are now working closely with neighbouring businesses and the grid operators on finding solutions. Such solutions might consist of unused reserve capacity, flexibility in the production of electricity, temporary storage of energy or the creation of virtual connection points with the grid. AVR production assets can be useful when offering services like these.
At InnoFase industrial estate in Duiven, where AVR is located, we collaborate actively in the setting up of an energy cooperative. One of the aims of this is optimum distribution of the capacity available in the local electricity grid through entering into a group connection and transmission contract with Liander. TenneT and Liander have appointed InnoFase energy site as a pilot for this. With these pilots, the grid operators aim to try and develop a solution with which more energy hubs can be facilitated in areas where there are bottlenecks in both the regional electricity grid and TenneT's national high-voltage grid.

With Project Phoenix, we rebuilt the plant in record time

Jos de Haan
Project Director, Phoenix

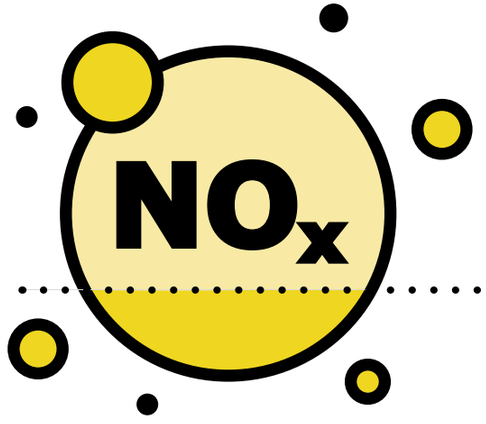
Hadeel Abdul Aziz
Manager of strategic projects

Hadeel: 'In the Phoenix Project, we rebuilt the new plant within a year of the fire. They were still literally extinguishing the fire in September 2023 when we were already thinking: should we really restore the existing plant? The steel construction was severely weakened and getting that site suitable would take too long. So we chose another one.'
Jos: 'It normally takes 6 months to get a building permit. But the handling of our application was accelerated due to the social importance. We submitted the papers mid-November 2023 and by the beginning of January 2024, we got approval. By the time, the pile driver was standing ready with the first pile.'
Hadeel: 'We didn't have the sizes and weight for the engineering yet, so we oversized everything to keep up the pace. It was placed between May and August. People worked incredibly hard, in shifts every day and weekends too. That meant there were people on site all the time, from traffic controllers to fire fighters.'
Jos: 'That takes management being on constant call, because there was no cutting corners on safety. That was always a priority. Always. But we did switch from the classic process with preparatory stages. We said, completely unrealistically: say we want to be in operation by 1 June, and there are no restrictions, what do we do? That out-of-the-box thinking led to the plan with which we were able to start operating in a limited way on 1 October. Compare it organising a party at home. That's simple. A Christmas dinner is always trickier and for a neighbourhood party, you need other people. You might say we organised a mass gathering, without a script. So there were surprises. We set up the consultation structures properly from the start. That meant we didn't have to have many meetings. Information was passed on to the project teams. We had a good planner and at a certain moment, we were actually even a few weeks ahead of schedule.'
Hadeel: 'We first made sure we were able to supply steam and district heat again. The construction of the turbine hall for electricity is Phase 2. That's very complex and could maybe take a year. Phases 3 and 4 follow then.'
Jos: 'We're proud of this achievement. But we're only a quarter of the way, so it's too early for a big celebration."

Nitrogen

Capturing nitrogen

NO_x is a by-product released when residual waste is incinerated. In itself, nitrogen is not harmful, but nitrogen oxide is not so harmless. Deposits of nitrogen oxide cause acidification of soil and water and disrupt the natural ecosystem and the biodiversity. That's why we capture as much nitrogen oxide from our flue gases as possible. We use advance filtering systems to do so.



NO_x emissions into the air
(ktonnes/year)

0.256 - 0.236

2024: 0.256
2023: 0.492
2022: 0.608

NH_3 emissions into the air
(kg/year)

0.008 - 0.022

2024: 0.008
2023: 0.030
2022: 0.040

N-Kjeldahl emissions into water
(kg/year)

0.027 +0.004

2024: 0.027
2023: 0.023
2022: 0.040

NO_x emissions kg/tonnes processed at Rozenburg
(ktonnes)

0.4 +0.1

2024: 0.4
2023: 0.3
2022: 0.3

NO_x emissions kg/tonnes processed at Duiven
(ktonnes)

0.2 -0.1

2024: 0.2
2023: 0.3
2022: 0.3

Consequences and policy

Nitrogen emission are too high, particularly in agriculture and to a lesser degree due to industry and traffic. The nitrogen precipitates in areas of nature where it leads to acidification of the soil and overgrowth of nitrogen-loving plants. Following a ruling by the Dutch Council of State in 2019, nitrogen policy had to be changed. The led to great tensions, especially in the agrarian sector. The cabinet under Prime Minister Schoof rescinded the plans in 2024, which only increased uncertainty, since there were no new plans on the table. The possibility of obtaining exemptions from European agreements is being investigated.

Fewer emissions

As a result of the fire, we operated far fewer business hours at Rozenburg, At both Duiven and Rozenburg, we are developing technical and technological measures to reduce nitrogen emissions.

We are reducing emissions of (NO_x) in various ways. We have a $DeNo_x$ installation to filter NO_x from the flue gases of our waste incineration installations. It captures NO_x by reacting with the ammonia (NH4OH) we inject into the installation. NH4OH reacts with NO_x and forms harmless nitrogen gas. In order to capture more NO_x, we injected more ammonia (NH4OH). With that, there is a risk that not all the NH_3 reacts with NO_x and subsequently slips through and ends up in the atmosphere. We have anticipated that by deploying an acid washer that captures any NH_3 that slips through the flue gases.

Results have improved in all the ovens, but the results per installation vary. On average, emissions in Duiven in 2024 are roughly 10% lower than in 2023.

Lower than required

AVR more than meets the legislation and regulations surrounding nitrogen. In AVR's permit at Duiven, we voluntarily included an extra responsibility to achieve, as an annual average, a value that is lower than the statutory requirements prescribe. In doing so, AVR demonstrates its social responsibility for this sensitive dossier.

Incident

At Duiven, ammonia (NH_3) escaped from a closed circulation system of the cooling unit used to liquefy CO_2. The NH_3 detection system triggered an alarm, prompting immediate intervention. This incident was reported and investigated thoroughly to prevent any recurrence.

We are ahead of the legislation

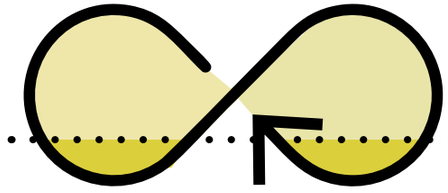
Gert Sterk
Plant Performance Manager, Duiven

"I started work at AVR as a process technologist in 2001 and I've always kept working in that area. Two colleagues and I keep the technical performance of our installations at the highest level possible. One part of that is making sure that emissions stay low, and that includes nitrogen emissions. AVR captures most of the nitrogen from the incineration. Harmless nitrogen gas is in the atmosphere. But nitrogen compounds are harmful, such as NH_3, or ammonia and NO_x, a collective name for a variety of nitrogen oxides. When they precipitate onto the Earth's surface, certain plants overgrow and others wither away, decreasing the biodiversity. According to the RIVM, most of that nitrogen deposit comes from agriculture and from outside the Netherlands. Industry emission are around 2% and AVR falls within that. Politicians want the industry to reduce by 30% but there is no legislation for that. We want to get ahead of that. In 2023, a student did their final thesis on researching our possibilities for further lowering emissions. With our installation, we can get them lower, but not 30%. Reducing nitrogen oxides goes as follows: We inject ammonia in to react with NO_x. The water in ammonia evaporates and the NH_3 is released and forms the harmless nitrogen gas with the NO_x. The ammonia and the NO_x have to meet at the right temperature, otherwise no reaction occurs and the nitrogen emissions increase. Through modification of the settings, we started injecting more ammonia and the emissions decreased in 90% of the cases. Sadly, that doesn't always succeed and then NH_3 escapes. A washing system cleans our flue gases. The NH_3 that didn't react is captured in that process. It does have a negative effect on the lifespan of the installation. We have to inject the ammonia in such a way that the maximum quantity of NO_x is reduced to nitrogen gas, that the escape of NH_3 remains within acceptable limits, that the corrosion of the installation is not excessive and that we don't use an unnecessarily large amount of energy for the capture. And all this in an unstable process, because the composition of waste is constantly changing. We set a goal every month and explore the limits of the installation. That way, we hope to stay ahead of the legislation, because the political discussion on nitrogen has stagnated. But we'll carry on, because as AVR, we want to operate a sustainable business."

Circular economy

Recovering raw materials

AVR contributes to the circular economy by recovering raw materials from the residual waste delivered. Every substance has value. We separate and sort materials and try to close the cycles as much as possible. That prevents us having to use new raw materials and prevents greenhouse gas emissions too. It also allows us to make sure that as little as possible is incinerated or taken to landfill. We aspire to the best possible quality in the raw materials recovered.



Captured CO_2
(tonnes)

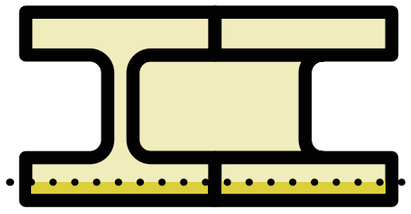
38.9 -4.4

Recycled
2024: 38.9
2023: 43.4
2022: 42.9

36.9 -2.7

Avoided emissions
2024: 36.9
2023: 39.6
2022: 40.8

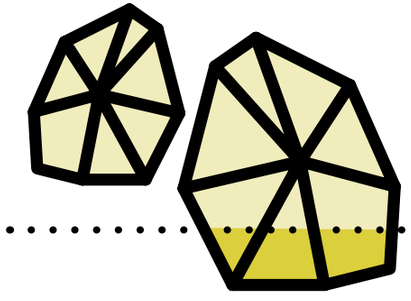
Quantities (tonnes)	Recycled 2024	Recycled 2023	Recycled 2022	Avoided emissions 2024	Avoided emissions 2023	Avoided emissions 2022
Captured CO_2	**38.9 (-4.4)**	43.4	42.9	**36.9 (-2.7)**	39.6	40.8
Minerals	**118.0 (-203)**	321.0	363.0	**0.4 (-0.8)**	1.2	1.3
Plastic Mix	**19.1 (-2.0)**	21.1	24.8	**20 (-13.7)**	33.7	39.7
Topcrete	**31.3 (+4.7)**	26.6	25.2	**25.7 (+3.9)**	21.8	20.7
Ferro Metals	**10 (-18.6)**	28.6	36.0	**12.4 (-29.9)**	42.3	53.2
Non-ferro Metals	**2.1 (-2.7)**	4.8	8.0	**19.9 (+25.1)**	45.0	75.8
Molybdenum	**0.2 (+0.18)**	0.02	0.1	**1.1 (+1.0)**	0.1	0.8



Metals
(as a percentage of the waste processed)

2.3% -0.3

2024: 2.3%
2023: 2.6%
2022: 2.6%



Minerals
(as a percentage of the waste processed)

22.2% -3.2

2024: 22.2%
2023: 25.4%
2022: 22.0%

Avoided emissions

Recycling materials means sustainability gains in a number of areas. It prevents the use of (fossil) raw materials for extraction or production and it avoids CO_2 emissions. In 2023, AVR avoided 184 ktonnes CO_2 emissions in this way. For more information on avoided CO_2 emissions, see the Climate Change Mitigation chapter on page 38.

Post-separation installation

After the fire at Rozenburg, the post-separation installation (NSI) with which we retrieve plastics, milk cartons and tin from the residual waste, restarted on 1 December with a single separation line. The NSI could have operated fully, in a technical sense, but there were logistical restrictions on the disposal of the residue. Normally, that would be sent on a conveyor belt to our own incineration installation but that wasn't already possible. So the NSI initially operated at 50% of it technical capacity.
In order to be able to continue serving the municipal clients, we contracted out external capacity for post-separation of the remaining waste.

In the course of 2024. both post-separation lines were put back in operation, but still at less than the full technical capacity. That only happened at the end of 2024, together with the starting up of the incineration lines and the dismantling of the diversion of the contracted residual waste. Although the fire and the reconstruction still affected the throughput volume of the NSI, the installation did still process more waste than was budgeted in the annual report.

In 2024, we continued working on raising the separation yield of the NSI. The improvement in the separation yield of 3D plastics, that had been achieved in 2023, stabilised further in 2024 Raising the purity of the foils was a spearhead in the financial year. Thanks to the steps we took to achieve that, the purity has improved significantly.

New municipality for post-separation

For some years now, we have been post-separating waste in the NSI that comes from a number of municipalities, including Rotterdam, Utrecht and The Hague. As of 2024, Voorschoten Municipality has also switched to post-separation. The contract was renewed by way of public tender in 2023. Post-separation of mixed residual household waste is now part of the waste contract with Voorschoten. That municipality brings roughly 5 ktonnes of residual waste to AVR every year.

Coffee capsules

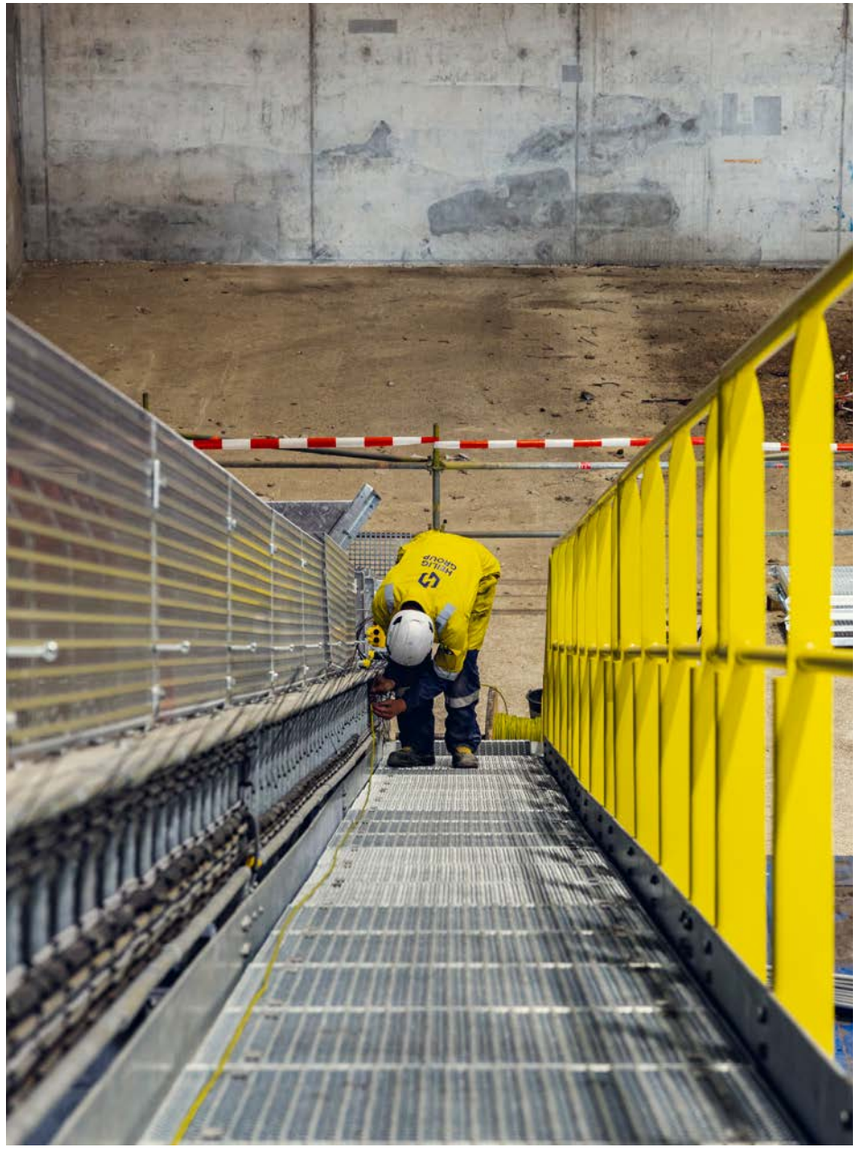
We had exploratory talks about the possibility of post-separating coffee capsules from household waste with the relevant trade association, Vereniging Koffiecapsule Recycling Nederland. We're starting sorting tests to establish how many coffee capsules there are in the residual waste.

Bottom ash, minerals and metals

Bottom ash is left after incineration of residual waste. It contains valuable metals and minerals suitable for high-grade recycling. For years now, the percentage rate of recovering the metals in bottom ash has been rising, thanks to the development of new separation techniques. There is also interest in salvaging the trace rare and strategic metals found in bottom ash, rather than have them lost to our economy. To achieve that, AVR collaborates with several chain partners.

Minerals from bottom ash are used, before or after cleaning, as construction material in the ground work, road-building and waterways sectors and as a raw material for construction materials. The requirements set for those minerals are becoming stricter. For example, the Circular Materials Plan (CMP) which is the successor to the LAP-3 (national waste materials plan), specifies that minerals from bottom ash may only be used if they meet the requirements for unmoulded or loose building materials. That means a substantial refinement of the current practice and it will demand a lot from our chain partners who are specialised in cleaning bottom ash.

In order to fulfil the ambitions for metals and minerals in the bottom ash, our bottom ash will have to meet more stringent requirements than we are used to before being sent to the partner companies specialised in its reprocessing. And that means that we must focus more on the quality of the bottom ash produced in our incineration process. We're also obliged to pre-treat the crude bottom ash, as an extra safeguard, before it can be disposed of. We put the bottom ash pre-treatment installation into operation at Rozenburg for that purpose in the autumn of 2024. The Duiven location will also be equipped with such an installation for 2025.



Laughing gas cylinders

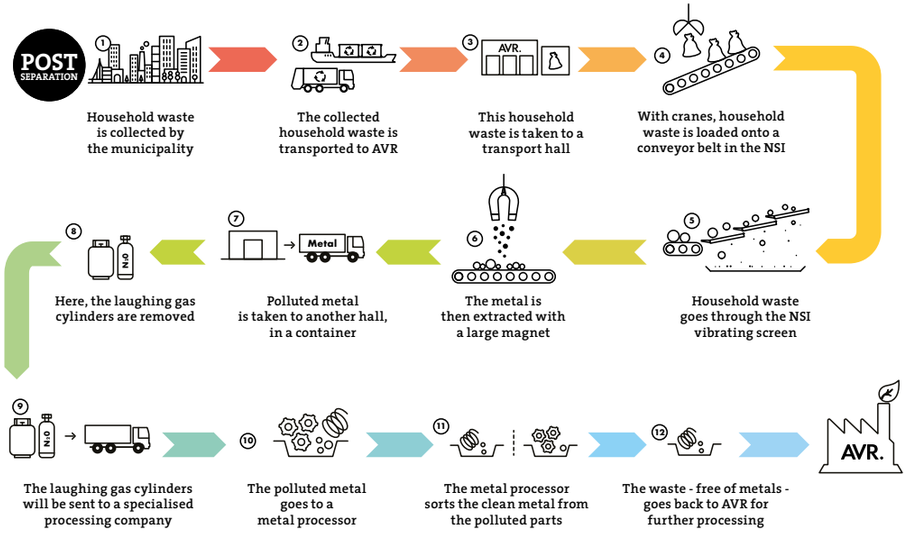
Since use of laughing gas was made illegal for consumers as of 1 January 2023, the informal deposit system for the Laughing gas cylinders lapsed. Since then, municipal residual waste contains a lot of these cylinders. If they land up in the incinerating ovens, they explode, with all the accompanying risks for our staff and high repair costs as a consequence. Removing the cylinders from the waste is very difficult.
We modified the NSI and since then, cylinders are removed together with the metals. That way, we prevent laughing gas cylinders landing up in the AVI. In addition, the remaining residual waste is shredded, so that we can spot the cylinders and remove them. These are expensive interventions.

As far back as 2023, and again in 2024, the industry has made this issue pending in politics. Little progress was made with the dossier in 2024.

Despite much social focus on it, and calls from the industry to take measures, the Cabinet's position is that it takes the problems with laughing gas cylinders "very seriously" but doesn't see itself responsible for solving them. In October, it was made known that several municipalities and public waste collectors are starting legal proceedings against the State to force financial support for collection of the cylinders.

Recycling of plastic

The plastic recycling sector has been under great pressure for a long time, due to the plentiful supply of cheap virgin plastic from Asia and the United States. In 2024, that led to an absolute wave of bankruptcies among Dutch plastic recyclers. These developments have no direct impact on AVR because we don't recycle plastics ourselves. All plastics and milk cartons post-separated by AVR are delivered exclusively to Verpact, that takes care of the further sorting and recycling.



Due to the severe problems and many bankruptcies of plastic recycler, questions were asked in Parliament of the relevant members. The Cabinet had State Secretary Jansen of Infrastructure and Water Management make a statement that the possibilities for intervening with individual companies already on the market are limited. For the time being, the Cabinet is committed to strengthening the recyclate market and making the plastics chain circular through a combination of pricing, standardising and stimulating. As part of the broader package, the Cabinet plans to introduce a levy on plastic from 2028 (pricing). The Cabinet is also working on forming the Nationale Circulaire Plastic Norm (NCPN) that will make it compulsory in the Netherlands to apply a certain percentage of plastic recylate and sustainable raw materials in the production of plastic -standardising- (15% in 2027 rising to between 25% and 30% in 2030). Lastly, the Cabinet is making subsidies to the tune of 267 million euros available to support companies in the transition to a circular plastics chain (stimulating). The Secretary of State has indicated that the effects of the NCPN and the levy on plastic will be integrally weighed in the Spring Memorandum of 2025. Until that time, no non-reversible decisions will be made.

Innovation

We intend to apply artificial intelligence (AI) in the NSI in the foreseeable future. In 2024, we ran a test period and at the beginning of 2025, we will install an AI application with which we receive real time operational control information about the composition and degree of purity of the product streams. This is done now, periodically, by means of manual sorting analyses.

AVR is involved in a project, with Unilever and Obbotec, that is a part of the Rotterdam Circulair programme. It's aimed at upscaling what's known as SPEX technology at Obbotec. SPEX is based on dissolution, that's to say the dissolving and purifying of plastics with a special solvent. With this technology, it's possible to process plastics to a high degree, into new materials. AVR supplies post-separated foils as input material for that. In 2024, after a successful test phase, Unilever and Obbotec decided to continue the collaboration and apply the technology on a larger scale.

Separating our own waste

In 2024, we started up initiatives for separating the waste that AVR itself produces, such as in the offices. This is in line with our goals for the waste we get from our clients, from which we also salvage as many reusable materials as possible. At both locations, we started collecting four raw materials separately.

"I'm proud of my work, because colleagues are proud of me"

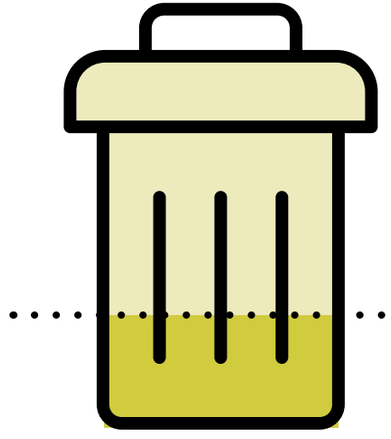
Ronald Wiegmann
Service specialist at Rozenburg

"I remember well how I came to work at AVR. I was working for a farmer and one day, my stepfather came and picked me up there in the old Opel Cadet. He took me with him to his work - he was a foreman at AVR. And someone there was leaving. I applied for the job and was able to start straight away. That was 36 years ago.
It was exciting for me. I hadn't earned much working for the farmer. I got much more at AVR.
I worked in the plant at first, cleaning. Vacuuming the boiler house from top to bottom and shovelling rubbish out of the boiler. All kinds of stuff falls between the rolls that turn while the waste is being incinerated. I would then clear up in the cellar, because everything that falls off the belt has to be swept up and put back on the belt. I also sometimes cleaned and polished the boiler house floor on my own. You could eat off it after that.
I now work in the other buildings, refilling toilet paper and emptying rubbish bins. The rubbish all goes into a container that gets emptied into the bunker every Tuesday. But now there will be new rubbish bins everywhere, and that's because of waste separation. The waste will then no longer all be put together. We have already been collecting beakers separately for a while. And at home, there's a separate bin outside for plastic. I think that's good for the environment.
I go to my work with pleasure. I never don't feel like it. I'm awake every night at 3 o'clock and just before 5 o'clock, I drive to the bike ferry between Maassluis and Rozenburg. I then cycle to AVR on the e-bike. I never get stuck in traffic and I like crossing with the ferry. There's now a tunnel for cyclists but I'm glad the bike ferry is staying too.
I'm proud of my work, because a lot of colleagues are proud of me. When I've been away for a couple of weeks, on holiday, the place is dirtier when I get back. And then everyone says: we're glad you're back!"

Use of resources and services

Application in processes

AVR buys in various raw materials, additives and services needed for the production process. Certain additives are needed to trigger reactions with other substances, to capture harmful emissions. Fossil fuels in particular are needed to start up the incineration lines. Various services are essential in supporting the business process. Take for example maintenance and cleaning of our installations. This chapter explains how we interact with the raw materials, additives and services that we buy in.



Total waste AVI
(ktonnes)

532 -775

2024: 532
2023: 1,307
2022: 1,652

Household waste
(ktonnes)

200 -371

2024: 200
2023: 571
2022: 742

Commercial waste
(ktonnes)

323 -196

2024: 323
2023: 519
2022: 564

Hazardous waste
(ktonnes)

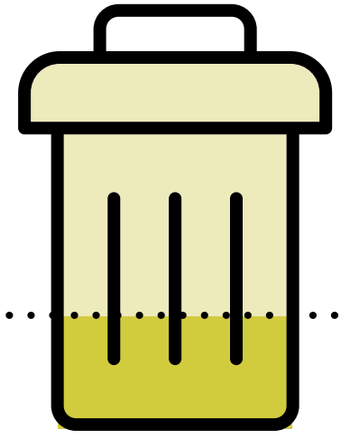
0.2 -77.8

2024: 0.2
2023: 78
2022: 119

Imported waste
(ktonnes)

8 -131

2024: 8
2023: 139
2022: 227



Total waste processed
(ktonnes)

890 -744

2024: 890
2023: 1,634
2022: 2,109

Biomass (waste wood)
(ktonnes)

132 +23

2024: 132
2023: 109
2022: 116

Biomass (paper pulp/sludge)
(ktonnes)

148 -1

2024: 148
2023: 149
2022: 142

Waste water
(ktonnes)

77 +8

2024: 77
2023: 69
2022: 199

Use of chemicals

We report qualitatively on the use of chemicals.

AVR uses diverse chemicals in the operational processes. At Rozenburg, for example, more than 25 types of chemicals are used. We use most of the substances in the reduction of emissions from our processes: cleaning the flue gases, filtering out furans and dioxins and capturing the CO_2 from the flue gases. We need three types of chemicals for purifying the flue gases: caustic soda, ammonia and lime. We use them constantly in the operation. Activated carbon is used in an activated carbon filter. To give you an idea: the activate carbon filter at Rozenburg is 27 metres high. Activated carbon binds furans and dioxins. At the top of the filter, clean activated carbon is added, while at the bottom, polluted carbon is removed. At the CO_2 capture installation at Duiven, we use mono-ethanolamine. The amines bind the CO_2 from the flue gases. By heating the amines to 100 degrees, the CO_2 is released again and the CO_2 can be stored and used.

Use of fossil fuels

AVR uses a variety of fossil fuels.

We mainly use **natural gas** in the water plant (WT). It's used to regulate the temperature and is also needed if there are no alternative waste materials present. Auxiliary boilers were deployed from March 2024, to supply heat to the heating company (WBR). Those auxiliary boilers consumed 30% of AVR's total gas consumption.

Heating oil is used to fire up the waste incinerating. If an incineration line is out of operation, for maintenance for example, it's fired up again using heating oil.

Diesel is the fuel used to the rolling material, such as loaders and cranes. A pilot is running to replace the cranes with electric ones. That would be possible, because the cranes mainly stand in the same place to sort waste. However, infrastructure is needed to be able to supply the necessary electricity, which is the focus of the pilot. The barges that transport the waste from The Hague and Rotterdam to the harbour at AVR also run on diesel. No barges sailed from our transfer station in Utrecht in 2024, because due to the fire, the waste from Utrecht was either processed at our Duiven plant or temporarily stored. Following the fire at Rozenburg, diesel was also used in the emergency generators that we needed for the reconstruction of the steam plant.

Lessons learnt from Duiven turbine malfunction

In July 2024, vibrations were noticed in Turbine 1 (TG-1) at Duiven. The original supplier, Siemens, was asked to make staff available, urgently, to investigate the vibrations. Siemens sent a turbine expert and daily progress meeting were immediately scheduled, at which both the progress and the technical challenges of getting the turbine operational again were discussed. In the progress meeting, the Purchasing department was involved so that they could make sure that offers were sent according to the correct terms and to assess whether they were in line with the turbine contract. The purchase orders were created in a timely manner and sent to Siemens, ensuring no delays on that front. Additionally, the necessary insurance was arranged for the transport to Siemens in Sweden.

The daily contact, the short lined between AVR and Siemens and the good collaboration led to a constructive project, resulting in the turbine being operational again at the end of September. A new contract is being drawn up to ensure that AVR continues to receive reliable support in the coming years.

Purchasing policy and Code of Conduct

Our purchasing policy is aimed at sustainable purchasing of goods and services. Naturally, the meaning of sustainable purchasing changes with the development of ESG and CSRD (see page 33 for the definition of these terms).

AVR operates a Supplier Code of Conduct, which it expects suppliers to adhere to. The code is printed on every Purchase Order for suppliers. In 2024, we adapted our Code of Conduct to the CSRD, so that we can share data transparently with our network. We expect that from our network too. By sharing data transparently in the chain, we can achieve a high degree of quality in our ESG report.

I get a whole lot of energy from ESG

Arnold Vastenhoud
Buyer, Duiven

"As a buyer, I purchase goods and services for AVR and I'm involved in investment projects. I divide my time - 70% at Duiven and the rest across all of AVR. The interesting thing is that my job is in itself very varied. Sustainability is becoming more and more important. And now there's ESG. That's going to have a big impact. In the chain, we're going to have to start thinking: to what extent has ESG been introduced at suppliers and their suppliers? Suppliers differ. Many companies employ someone especially, as do we: our internal ESG guru, Bram. With matters such as purchasing orders, we attach our Code of Conduct which contains a bit of ESG, about ethical standards and employee rights, for example. We want to move forward with it, but it's finding the right structure. If we need chemicals, we can just order what we always use, of course, but we can also ask: is there a green alternative? And it turns out that there is, but the supplier has never told us. So clarity is needed from both sides.

ESG is necessary, if only because of the heating up of the planet. You shouldn't want child labour either. We want to make clear what we find acceptable. That's a challenge, but when I talk to our ESG man, Bram, I get really enthusiastic. I get a whole lot of energy from it. I do however foresee that we could be restricted in certain areas. Say you get a really nice offer in terms of price, but ESG is missing. What do you choose? We'd also really like electric loaders. Even if they're in stock, they cost two to three times more and the batteries don't last long enough, so you need two. That's a dilemma.

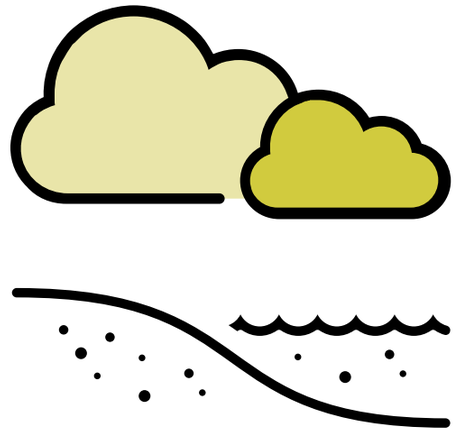
We have to put pressure on manufacturers, but government subsidy also has to make things more attractive or even feasible. It's a journey of discovery. We ask parties where they're at, but it's just as important to know how the manufacturers behind them are dealing with it, so we ask on.

At AVR, the awareness is catching on. We're front runners at Purchasing, and get other departments involved. As in the case of the loaders: the logistics team also gets involved in ESG. That's when it really starts to take off.. In the end, we'd like colleagues to come up with it themselves, be critical of offers that don't meet ESG. That realisation still has to grow."

Pollution

Minimalising negative impact

AVR plays an important social role:
we process residual waste, produce energy and recover raw materials. That means we have a positive impact on society. But substances are also released during our processes that have a negative impact. It's our responsibility to keep that impact as low as possible. For that reason, we invest in technologies for the reduction of our emissions.



KPI (kg/year)	**TYPE**	**E PRTR kg/yr***	**2024**	**2023**	**2022**
Dioxins and furans as TEQ**	Air	0.000100	**below threshold**	0.000107	0.000461
Mercury	Air	10	**below threshold**	36.20	11.06
Nitrogen oxide	Air	10,000	**45,758**	73,657	55,044
Chloride	Water	2,000,000	**2,631,029**	7,266,652	11,583,145
Chrome threshold	Water	50	**below threshold**	below threshold	64.83
Fluorides	Water	2,000	**2,078**	3,171	4,607
Lead	Water	20	**below threshold**	below threshold	26.76
Mercury	Water	1	**below threshold**	below threshold	12.65
Nickel	Water	20	**below threshold**	below threshold	24.74
Total organic carbon	Water	50,000	**below threshold**	below threshold	96,671
Zinc	Water	100	**below threshold**	below threshold	142.46

* According to the European Pollutant Release Transfer Register (E PRTR), certain companies are obliged to report their emissions annually in the case of exceeding threshold values. Under the CSRD, only emissions exceeding the E-PRTR threshold are reported. Reported figures are consolidated only if emissions from both facilities exceed the threshold. If one facility remains below the reporting threshold, the data is neither consolidated nor reported.

** TEQ = Toxic Equivalency.

Rozenburg

Particulate matter emissions processed waste Rozenburg (kg/tonnes)

0.0033 +0.0005

2024: 0.0033
2023: 0.0028
2022: 0.0026

Dioxin emissions processed waste Rozenburg (g/tonnes) +0.0000000403

0.0000000451

2024: 0.0000000451
2023: 0.0000000048
2022: 0.0000002800

Duiven

Particulates matter emissions processed waste Duiven (kg/tonnes)

0.0017 =

2024: 0.0017
2023: 0.0017
2022: 0.0023

Dioxin emissions processed waste Duiven (g/tonnes) -0.0000001103

0.0000001697

2024: 0.0000001697
2023: 0.0000002800
2022: 0.0000001200

Definition of pollution

Our processes result in the release of not only CO_2 (see the chapter Climate Mitigation) but also of other harmful substances such as particulates and dioxins. These emissions are released into the air, the ground and water. We will return to emissions into the ground below. Emissions into water and the air are material. For them, we have established KPIs on which we report in this annual report. The residual waste we receive also contains substances of very high concern (SVHC).

Emissions from diverted waste

The emissions from the incineration ovens are significantly lower than in previous years, because the incineration lines at Rozenburg only returned to partial operation from October 2024. But there were still emissions elsewhere. Waste was temporarily stored, which means potential emissions of methane. In addition, some of the waste destined for Rozenburg was processed elsewhere. Waste destined for Rozenburg from the transfer station at Utrecht was diverted to Duiven. Some emissions at Duiven increased slightly, but that can't be directly traced back to processing the waste from Rozenburg. Emissions caused by processed waste that was destined for Rozenburg and processed somewhere other than at AVR were not monitored or investigated for this annual report. AVR has a duty to report on the emissions in Scope 3 in the operation for the year 2025. Emissions in Scope 3 are indirect emissions (see the chapter on Climate change mitigation page 38). For the year 2026, AVR expects to be able to process the waste destined for Rozenburg itself, so the emissions will once again fall within our own operation.

Good housekeeping

During the construction of the new steam plant, there was more noise but there were no complaints about that from the surroundings.

Other emissions

The chapters on Nitrogen (see page 58) and Climate change mitigation (see page 38), describe the ambitions for and actions to reduce emissions. There is nothing unusual to report about other emissions. There were fewer emissions at Rozenburg in 2024, because the grate incinerators were out of operation for the greater part of the year.

Emissions into the soil are not measured. The reason is that we have impermeable floors that are checked visually throughout the year and inspected in detail every six years, in line with underlying legislation. There was one incidence in 2024 of an emission being released into the soil. In our CO_2 capture installation at Duiven, we use the solvent mono-ethanolamine (MEA). It's stored in liquid-tight containers, standing on impermeable tarpaulins with a raised edge to catch any leakage. A misunderstanding led to no tarpaulin being placed under one of the containers, allowing MEA to leak into the soil. We immediately informed the local competent authority. The ground around the MEA container was dug up and an external company tested the soil. No contamination was detected. AVR Duiven investigated the cause of the incident and took appropriate measures to prevent emissions into the soil.

Substances of Very High Concern (SVHC)

In many of the waste streams that AVR processes, there are low concentrations of substances of very high concern (SVHC) that are harmful to the health. We want to be able to process all waste in such a way that the SVHC are degraded during the incineration or captured during the cleaning of flue gases or water treatment for further processing. Most organic SVHC are degraded in the incineration oven at 1,000 degrees. The amounts that remain are very minimal compared to those present in the waste before processing.

SVHC can stay behind in the bottom ash. AVR has an intensive measuring programme with which to monitor the presence of SVHC in the removed bottom ash. One problem is that there are no norms in place for many of the SVHC potentially present, so that there is uncertainty about the application of the mineral products that are produced from the bottom ash. So AVR advocates for clear and realistic norms to be established, also by the government, in order to safeguard the continuity of a safe distribution of bottom ash, without obstructing the waste incineration.

During an extensive inventory in 2020, we established the types of SVHC found in incoming waste, in our emissions, in the additives and in the residual streams. We did this for the bioenergy plant (BEC), the thermal conversion installation (TCI), the Water Treatment installation (WT) and the waste incinerating installations (AVI) at Duiven and Rozenburg. We also looked into the amounts of SVHC emissions and the techniques with which we could prevent or restrict them.

AVR is one of the companies are required to draw up a progress report every five years in the context of the avoidance and reduction plan. The outcome of this study is important for the processors of the residual substances after incineration, such as bottom ash, because they can include it in their own processes.

Inventory from 2020 on the basis of the SGS Intron Report SVHC in waste, physical-chemical properties of materials and monitoring results. The number of SVHC per level cannot be counted; some SVHC are divided among multiple levels.

X = pollution in the waste streams that are not always mentioned in the Material Safety Data Sheet (MSDS) of waste streams. These are measured when carrying out the monitoring protocol or the measuring obligations. This concerns the following categories: PAK, PCDD/F, mercury, lead, nickel, arsenic, cadmium and cobalt compounds.

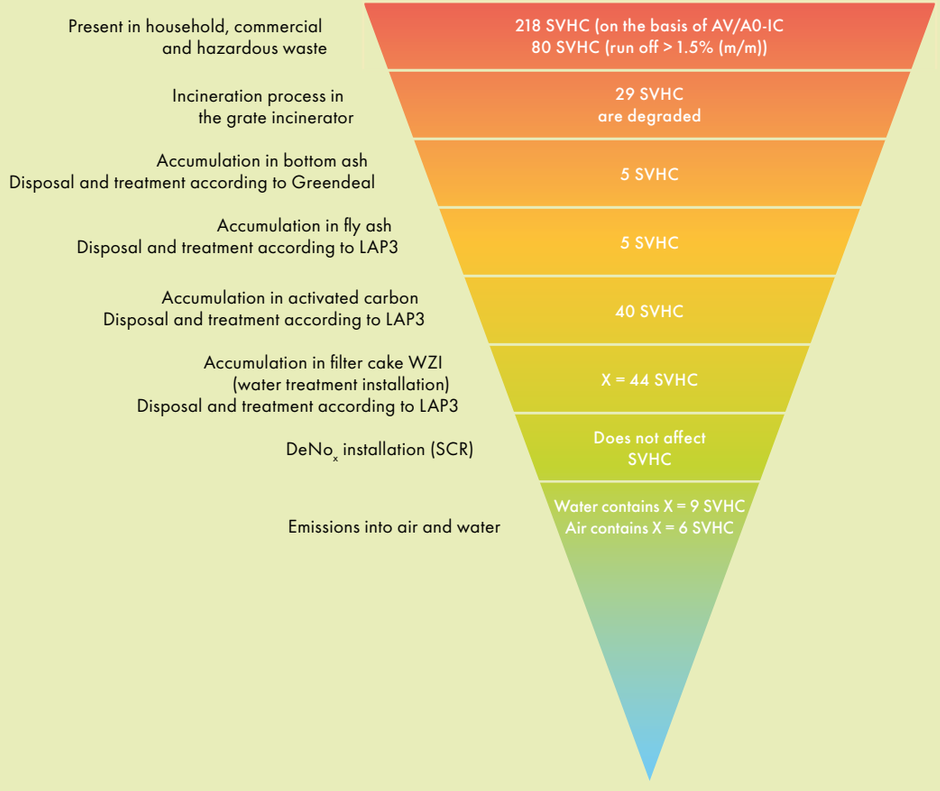
Conclusions:

- The 2020 inventory revealed SVHC that accumulate in residual streams and/or can be emitted. They are in particular dioxins/furans, PAK, PFAS, mercury, lead, nickel, arsenic, cadmium and cobalt.
- The SVHC not degraded during thermal processing are collected in one or more residual streams and subsequently removed and treated according to valid legislation and regulations.
- The emissions meet the requirements in the Dutch BREF, WABO and Water permit.

PFAS

A lot of extinguishing water was used on the fire, but also extinguishing foam containing PFAS. Due to the contact with extinguishing water, 40,000 m^3 of water containing PFAS was left. It was temporarily stored in barges. There were 20 barges of water containing PFAS moored at the quay. That water had to be purified before it could be discharged. Since AVR has no biological water treatment installation, the processing had to take place externally. However, those external treatments are not licensed to take in water containing PFAS. So AVR pre-treated the water in its own water treatment facilities which are normally used to treat the washing water from the cleaning of the flue gases. This process filtered the PFAS from the water, after which it could be sent to the external treatment.

SVHC through the incineration process



We all want the same thing: a clean environment

Leo Arrindell
Group Leader Transfer & Transport, Rotterdam

"I came to work AVR's former incineration location on the Brielselaan in Rotterdam 27 years ago, through a temping agency. I was later asked to stay on. At first, I had a problem with the smell of waste, but that passed. You get used to it and start to accept it. I learned to love the company in the end. I've become a part of it.

Through time, I've developed to foreman and lastly to group leader. I enjoy that, because the combination of working both indoors and out suits me. AVR gives you opportunities, but you have to want to take them. If people in our department are ambitious to grow, I help them with that. I'm currently replacing my manager, and I have good support in that. That's nice.

There are two transfer stations in Rotterdam: one on the Brielselaan and one in the Keilehaven. There, the waste from Rotterdam is tipped directly through chutes into barges on the water. The employees guide the waste by way of a valve. If the barge is full, the gunwales are cleaned and a tug transports the barge to Rozenburg.

We strive to tip 100% spill-free. For that reason, there are plastic strips at the rear holding back any waste that slips to the back, so that it doesn't fall into the water. But tipping with absolutely no spillage is very difficult. We've had cameras placed so we can see where the spills come from. As it's tipped into the barge, some of the waste rises, and lighter items can fall out.

Our watchdog DCMR and Rijkswaterstaat inspect us and the feedback from that is fairly positive. It's good to have other eyes on the subject.

We've mounted nets on the points of the valve for improvement, so that waste that is blown into the air can't easily fall in between. Just behind the harbour, their is a park, and the municipality has placed a screen to avoid littering on the quay.

We do everything in our power to keep the area clean. Our people have toolboxes and we regularly discuss and look at what we can improve. It's a big challenge, but I think they do a good job. And if other people have any suggestions for improvement, we're happy to hear them, because in the end, we all want the same thing: a clean environment."

ESG

Social

Safety and well-being

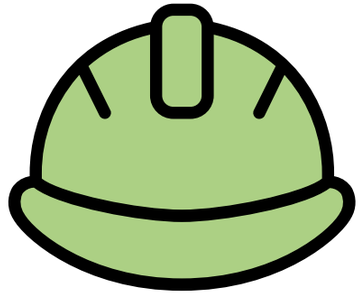
Social engagement

Responsible supply chain

Safety and well-being

Safe and healthy at work

Our goal: to send everyone home safe and healthy after every workday. Given our complex installation that operate 24/7 on our sites, where there is a lot of activity, that needs a lot of attention. Our employees and contractors must be able to work safely there. And we find the health and well-being of our people important. For that reason, we have a strong focus on prevention of sick leave at AVR.



Fatalities
(employee & non-employee)

0 =

2024: 0
2023: 0
2022: 0

Lost-time incidents
(employee & non-employee)

8 +7

2024: 8
2023: 1
2022: 4

Lost-time incidents
(employee)

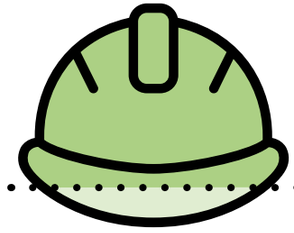
5 +5

2024: 5
2023: 0
2022: 3

Lost-time incidents
(non-employee)

3 +2

2024: 3
2023: 1
2022: 1



IF-rate**

4.00 +3.19

2024: 4.00
2023: 0.81
2022: 3.26

TRIF-rate**

10.01 +1.94

2024: 10.01
2023: 8.07
2022: 14.70

Total hours worked
(employee & non-employee)*

1,998,701 +760,282

2024: 1,998,701
2023: 1,238,419
2022: 1,226,938

Total hours worked
(employee)*

960,400 +391,900

2024: 960,400
2023: 568,500
2022: 570,694

Total hours worked
(non-employee)*

1,038,301 +368,382

2024: 1,038,301
2023: 669,919
2022: 656,244

VOR's

4,654 +3,679

2024: 4,654
2023: 975
2022: 1,435

* The total number of hours is an estimate. AVR is working on a more extensive and accurate calculation of hours as required by the CSRD. As a result of the revised calculation, the number of hours worked has increased.

** Internationally, there are many interpretations of how the Injury Frequency Rate (IF rate) and the Total Recordable Cases Rate (TRC rate)—which together form the Total Recordable Injury Frequency (TRIF)—should be calculated. According to the CSRD, the IF rate is the respective number of work-related injuries divided by the total number of hours worked, multiplied by one million hours worked. The CSRD provides the following examples: injuries sustained while driving for work (but not during commuting), injuries occurring while working from home, and complaints resulting from a psychological condition, provided a professional determines them to be work-related. However, the CSRD does not specify to what extent work-related complaints should be included, nor does it address the severity of such cases. Within the IF rate at AVR, injuries that result in an employee and/or non-employee being unable to work for more than one day are included. This differs from the Total Recordable Cases rate, which includes first-aid cases as well as cases where an employee and/or non-employee is unable to work for the remainder of the day. Incidents that were "near misses" and thus did not actually occur are not included in the count. The TRIF rate is calculated by adding up cases of lost time, restricted workdays, and medical treatment, dividing this total by the overall number of hours worked, and then multiplying by one million hours worked.

Safety

Safety policy

Our safety policy is applies to our permanent employees, and also to others present at our locations. We follow the "8 Life-Saving Rules" from the safety guide for activities with the highest potential safety risks. The aim is to have those activities run safely. Managers demonstrate exemplary behaviour and are responsible for everyone on our sites adhering to these rules and the statutory regulations. If it isn't safe, employees have the right to stop work until the situation is safe. We also have measures in place for traffic safety on our sites, such as rules for traffic, walking routes and parking. Lastly, we have five basic rules which include the wearing of personal protection equipment.

Toolboxes

In order to get everyone to understand the necessity of preventing safety incidents and to create awareness, we give employees toolboxes. These are training sessions that every employee has to take and pass. Toolboxes are compulsory for all employees. In addition, hundreds of contractors fill in the toolboxes. If someone doesn't pass a toolbox or hasn't filled it in, there are consequences. That might be a talk with a manager, management or the safety coordinator. That way, we emphasise the necessity and importance of toolboxes.

Safety Observation Rounds (VOR)

Our employees regularly walk safety observation rounds (VORs). Any resulting reports are registered in our system, Ultimo. The advice is to walk a VOR with two or three people: after all, four eyes see more than two. In 2024, we linked a proportion of our remuneration or bonus to walking a minimum number of VORs. That resulted in five times the number of rounds being walked. This is, in itself, a positive development. However, not all registrations from the VORs in Ultimo are good enough quality. Also, the administration doesn't get completed after VORs have been walked or if there are multiple rounds walked by the same person in one week. And the number of VORs increases just before the deadline for completing the required number for the bonus. AVR is a learning organisation and aims to handle this with care. In 2025, we will evaluate the process surrounding the VORs, to ensure that the rounds remain a means to safeguarding safety, rather than a way to get a bonus.

Start of Safety Culture Ladder

In 2024, we started implementing the NEN Safety Culture Ladder (SCL). The lifesaving rules are a means, but the SCL can be seen as a goal. The SCL has five treads, each of which represents a level of safety awareness. Each tread corresponds to desirable behaviour: from Tread 1, where safety barely plays a role, to Tread 5, where attention to safety is self-evident in all business processes. It's not know on which tread we are at present, but from the theme of Safety & Wellbeing, AVR has the ambition to reach the highest tread. So in 2025, we will also be promoting the SCL throughout the organisation.

Review of sanction and reward policy

We have reviewed our sanction and reward policy. This policy stimulates good behaviour by means of reward and offers insight into possible consequences and sanctions in undesirable situations. The eight lifesaving rules are explicitly included. This policy is ultimately aimed at having everyone viewing the safety and behaviour rules as self-evident and acting accordingly.

Mould

An incident occurred at Rozenburg with biological agentia (living organisms that can cause physical reactions) as they're called. It was about mould forming. That wasn't entirely unexpected.
Our installations normally run constantly and heat the surrounding, including the cellar. Since the fire, those installations were switched off and mould formed in the cellar, which was colder and damper. AVR took direct action and followed all protocols. We set up a continuous measuring programme. There was transparent communication with the local competent authority and we communicated in detail with colleagues.
The requirements for personal protection equipment were tightened, we drew up a list of measures and a compulsory toolbox was set up for our employees and contractors. All these actions are aimed at preventing exposure and increasing awareness. In October 2024, the incineration ovens were put back into operation. The mould is expected to clear up itself. Despite that, we remain alert to the possibility of mould forming, in particular in places where employees potentially come in contact with waste.

Accident

Statistically, 2024 was a good year as far as accidents and safety are concerned. However, we weren't completed spared from incidents.
There was an accident in the post-separation installation (NSI) at Rozenburg in March.
While moving bales of plastic waste from the NSI, the forklift truck tipped over and an employee's leg was trapped. Contact with the control room wasn't possible, so the entrapment lasted around ten minutes. The employee was admitted to hospital with a complex fracture of the leg. AVR took immediate measures to prevent such accidents. We placed extra walkie-talkies to guarantee communication and reports. A toolbox, which is compulsory for employees and contractors, contains all the rules and agreements surrounding safe traffic and use of rolling material. All those involved are also informed and in some cases called on to recognise and prevent accidents like this one.

Well-being

Sick leave

2024	2023	2022
6.3%	5.4%	5.7%

Sick leave in 2024

The average sick leave figure was 6.3%, which is higher than that of 2023. We experienced a peak in February and March 2024, and also saw the frequency of notifications increasing. At that time, there was a flu epidemic in the Netherlands.

At AVR, we mostly see instances of medium to long sick leave. This has a big impact on the sick leave figures. The medium and long-term sick leave is caused by long-term symptoms, both physical and psychological.

There is a general increase to be seen among working Dutch people in the number of sick leave days as a result of psychological problems. Roughly 43% of the costs of sick leave in the Netherlands are due to psychologically-related sick leave. Figures from the Nationale Enquête Arbeidsomstandigheden by TNO and CBS show that young working Dutch people (18-34 years old) have increasing problems from psychological symptoms. That survey shows that pressure to achieve, uncertainties in life and social pressure are the main sources of the stress experienced. The percentage of sick leave in the age categories of 21-30 and 31-40, both nationally and at AVR, has also risen compared to recent years.

We work closely with Health and Safety Services to monitor this well. We plan to organise several workshops in 2025, one of which will deal with good work-life balance. We're looking into what other needs there are in this target group.

A proactive approach is needed to safeguard the vitality and productivity of employees and restrict sick leave. We're still looking to see if it can help to make resources available, such as coaching (also financial), exchanging ideas about modified work and offering more flexibility. In addition, we regularly hold consultations with the Social Medical Team. That consists of representatives of AVR who are involved in sick leave and prevention, and the Health and Safety Services. We also organise annual sick leave workshops for managers. HR monitors frequent sick leave and coordinates with the manager about it. HR also has weekly contact with the employability coach of our Health and Safety Services.

The power of advertising is repetition, and the same goes for safety

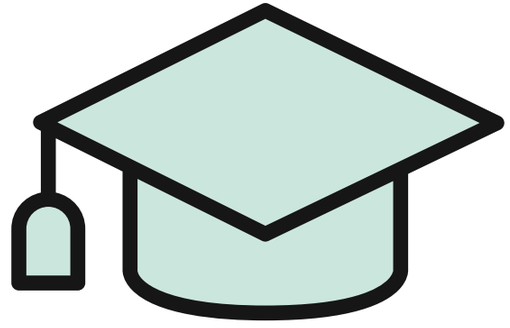
Gerard Töpfer
Safety expert, Duiven

"I started work for AVR at Duiven in 2023. I really like it. The people here are very safety-conscious, I have to compliment them on that. They understand that working safely is in their own interests. And focus on that mustn't be allowed to slip.
We had a fire drill yesterday, with the EROs (Emergency Response Officers). I do enjoy that. I watch how, for example, the team leader takes over and instructs people. EROs have to learn to communicate well with the fire fighters. One colleague was nervous, but I said they didn't have to be - it's okay to make mistakes during a drill. Practice is important. The power of advertising is repetition, and the same goes for. I was proud of him for taking part.
Every day, two people walk across the site for a VOR, a safety observation round. The duos are people from all through the company, from MT to office and production. A VOR is planned in changing compositions every day. The idea is to look at what's happening on site and talk to colleagues, About the meeting places for calamities, for example. Then there's the question: are they safe? Why do you think so? It's about how you interpret safety. Those walking a VOR also call people out for unsafe situations. Or they discuss the latest risk analysis, so whether the escape route is obstacle-free and whether the work environment is tidy. That has to be second nature for everyone. As I always say: The devil is in the detail and little things can be dangerous. Like doing something quickly, unthinkingly, or leaving a door open. People generally underestimate danger. But this is about their own safety and that of their colleagues.
Anything that is registered during a VOR is addressed at the opening of the day the next day. We want to keep control but we don't want to police. Explaining why is just as important. Have you thought about the danger? How we solve this together? What do you need from me and what do I need from you? They know their equipment better than I do, so I need their feedback. The people in the workplace make suggestions too, it's an exchange. We also exchange experiences with Rozenburg, because we can all learn from each other."

Social engagement

For employees and society

We are dependent for our success on the commitment of our staff. They perform at their best if they're energetic and healthy and have the right knowledge, and if the atmosphere at work is pleasant.
We give them the tools to stay healthy, physically and mentally, and offer training courses and education to further their personal development. That increases pleasure in their work and the results, and so we're contributing so society. We also do that with out commitment to good causes.



KPI (% of gross salary)	2024	2023	2022
Training and education costs	2.7	3.2	3.2

KPI (numbers)	2024	2023	2022
Number of employees	520	Not measured	Not measured
of whom women	57	Not measured	Not measured
of whom men	463	Not measured	Not measured
of whom female managers	6	Not measured	Not measured
of whom male managers	31	Not measured	Not measured
of whom female non-managers	51	Not measured	Not measured
of whom male non-managers	432	Not measured	Not measured
of whom aged 19 or younger	0	Not measured	Not measured
of whom aged 20-29	64	Not measured	Not measured
of whom aged 30-39	107	Not measured	Not measured
of whom aged 40-49	90	Not measured	Not measured
of whom aged 50-59	173	Not measured	Not measured
of whom aged 60 or older	86	Not measured	Not measured
of whom employed in the EU	520	Not measured	Not measured
of whom directly or indirectly subject to a CBA (%)	100	Not measured	Not measured
of whom earning less than the minimum wage (%)	0%	Not measured	Not measured

KPI (numbers)	**2024**	**2023**	**2022**
Total number of training and education hours*	12,186	Not measured	Not measured
of which for female managers	185	Not measured	Not measured
of which for male managers	772	Not measured	Not measured
of which for female non-managers	416	Not measured	Not measured
of which for male non-managers	10,813	Not measured	Not measured
Average number of training hours per employee	23	Not measured	Not measured
Average number of training hours for female managers	31	Not measured	Not measured
Average number of training hours for male managers	25	Not measured	Not measured
Average number of training hours for female non-managers	8	Niet gemeten	Not measured
Average number of training hours for male non-managers	25	Not measured	Not measured
% Full-time employees who received training and education	100	Not measured	Not measured

Education and training

Throughout 2024, much focus went to onboarding new colleagues. For colleagues at Duiven, we set up a basic programme for that. At Rozenburg too, we have given a lot of basic training and refreshed knowledge for the production, due to the stoppage. We gave basic training in waste incineration and training in flue gas cleaning, district heating and the plant. Operators were given refresher courses by means of simulation and by accompanying colleagues at Duiven.

In the summer of 2024, we implemented the learning-management system Popay Learn for all of AVR. Through this system, employees and managers gain full insight into the status of compulsory training courses. Those compulsory training courses are now added fully automatically for a new employee and are job-dependent. With this system, we have taken a significant step forwards for the development of our staff. We have always done a lot with education and schooling but most of the focus was on the compulsory training courses. Whether the training course was taken depended also on the employee themselves or the manager, and all initiatives had to be entered manually. That all goes so much more smoothly with Popay Learn: the employee can sign up themselves through the Popay Learn catalogue and schedule training dates.

* Training and education in this table exclude online training, toolbox training, fire safety training, and anti-corruption training. Training and education reported in this table are provided by an external training coordinator and conducted in person on-site.

Signing up for non-compulsory training is also possible through this system. The application goes directly to the manager for approval. And if an employee wants to take a training course that's not yet in Popay, they can request it through the system. Even more important is the fact that Popay can give insight into individual growth paths and employees' development, so that they can continue to develop or be promoted within AVR. We're going to activate that in 2025.

Our focus around education and training has been mostly on safety. We talked with managers about which knowledge is necessary and which training courses employees should have to take for that. Cyber security was also on the agenda in 2024: we distributed films to show how staff could avoid our systems being broken into. All employees are required to have monthly training in the area of safety. The topics vary, from safety on site to recognising unsafe situation and visibility on our sites.

Leadership programme

EAn external agency carried out a leadership programme for us in 2024. All 70 managers were given management training on the theme of safety. The programme was aimed at facilitatory leadership: creating trust, coaching, listening, addressing people correctly and developing a team. The emphasis was on the manager's own role in all that. Social safety had a special role. We will be organising a follow-up to this training course in 2025.

The chief operators of the post-separation installation followed a management programme following on from the training courses for Logistics that we gave new employees in 2023.

Management manual

We put together a management manual in 2024 in which we list what AVR expects from managers. The initiative comes from the fact that not every manager has enough knowledge. The manual contains guidelines for the recruitment process, information about sick leave and knowledge about the functioning and development of employees and how to conduct interviews. We expect to launch the manual at the beginning of 2025.

Sustainable employability

Employability coach

To keep our employees fit and energetic, we have a policy for sustainable employability. The Health and Safety Services supports us in implementing it. For example, that organisation offers us an employability coach who is the first point of contact in the case of sick leave. If an employer reports sick, the manager gauges how long they might be absent. If it's more than a week, the employability coach is engaged. We look at why the sick leave is this length and what the options are for getting the employee back to work. The purpose of this is to give the manager more possibilities for action.

The employability coach gave managers at AVR a training session on employability. That will take place again in 2025. The training session will then be compulsory. It covers such subjects as how managers should conduct the interview about sick leave, and frequent sick leave. Sick leave is considered frequent if an employee reports sick more than three times a year. The manager learns which signals there are beforehand and to take them seriously. There is also focus on recognising signs of psychological problems such as burn-out.

With the Health and Safety Services employability coach, the managers and HR, many discussions are held about the sustainable employability of our staff. One result of this was us saying goodbye to a number of colleagues in 2024 who chose to make use of the early retirement scheme (RVU).

Vitality
We carried out a preventive medical examination (PMO) at the beginning of 2024. That's an anonymous and voluntary examination into the physical and mental health of employees. Although employees take part voluntarily, we did ask the managers to encourage participation, so that we can gain insight into potential problems in our employees, particularly among the older population. We can then take direct action on that. Of the 475 employees that were in permanent employment at the time of the examination, 217 took part. Employees were given insight into their sleep patterns, stress levels, blood pressure, eating habits and weight.

In response to the PMO, AVR was advised to motivate managers to talk to employees about training and development. This was included in the leadership programme. Also in response to the PMO was discussion about undesirable behaviour, and about the fact that we have an internal and an external confidential counsellor. A toolbox has been made about what we see as bullying and what the consequences are. Work stress and mental stress were also dealt with. Managers were asked to monitor this better and to organise workshops on dealing with stress. Young people in particular are looking for a good balance between life and work, and this is a point of action for 2025. We're also going to organise workshops on healthy nutrition, sleep and exercise.

Diversity and inclusiveness

Man - woman diversity
For a company like AVR with many technical jobs it's almost impossible to achieve a good balance between the number of male and female employees. Because there are proportionally many more men trained in technical jobs, it's almost impossible to change this at AVR. However, that doesn't mean we don't try to attract more women. We have taken various initiatives for that.

Our website - www.werkenbijavr.nl - went live in 2024. We hope to reach the broadest possible target group with it. The job vacancy texts on the website are screened for gender neutrality and tone.
We also reviewed the profiles for recruitment. Studies show that women don't apply if they don't fully meet all the requirement, while men are less hesitant. With that knowledge, we looked at which are firm requirements and which are possibly only advantages. The texts on the website have also been made more woman-friendly and we have hired two female recruiters.

Cultural diversity
AVR has employees with many different cultural backgrounds. In that respect, we form a better reflection of the society than in gender diversity.

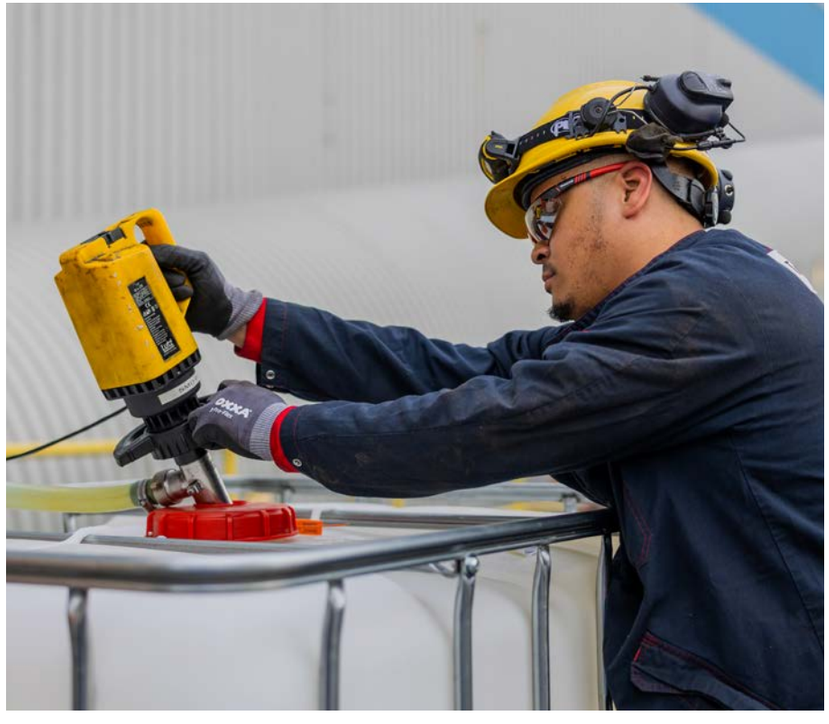
Staff recruitment and retention

As in many sectors, it isn't easy to find new staff in our sector. So in 2024, we took on two recruiters whose whole focus is attracting talent. In addition to the website already mentioned - werkenbijavr.nl - a new recruitment tool was implemented.
We can use it to do measurements based on data. We also offer managers in this system guidelines for job interviews, to increase objectivity. That way, we hope to fill vacancies more effectively and have people commit to us.

Job evaluation and remuneration
In 2024, all CLA jobs were re-evaluated, in line with the CLA agreement. This was a huge project that we approached extremely conscientiously. A classification committee was set up and together with the employers' association AWVN, we weighed all jobs. Some were classified higher and a few lower. In the latter case, the employees will retain their current rights.

We also looked into how our remuneration compares to that in the market. For the remuneration of employees, AVR is covered by the CLA for Raw Materials, Energy and Environment (GEO).

Neighbouring companies in De Botlek are covered by the CLA for the chemicals industry. We had a benchmark carried out to see how our employment conditions compare to those for the chemicals industry. If they were better than ours, it would be more difficult for us to fill job vacancies with local people than it would for our neighbouring companies. The study showed that the employment conditions were largely the same. Only a few jobs in production were classified lower at AVR.
We valued them higher in the job evaluation. After that redress, AVR is now above benchmark.



Value proposition
Lastly, we asked an external agency to carry out a study, on the basis of which we can set up and express our Employer Value Proposition. AVR is mainly known for waste processing but we do much more, and many people might not be aware of that. If we can make clearer what makes AVR unique, we can position ourselves more strongly in the market. To get input for this, we held a survey among our staff and organised three workshops. One of the questions was why employees are happy to work at AVR. The answer was that AVR is financially durable and a reliable and stable employer. The employees are flexible, solution-oriented, engaged and enthusiastic and they have heart for the business and each other. Our people are given a lot of freedom in their work and room to grow. They have a lot of technical knowledge, and innovation surrounding sustainability is high on the agenda.

We also asked questions externally to find out what makes AVR unique in the eyes of outsiders. That turns out to be sustainability. The younger generation in particular finds this important. The fact that we convert waste into energy through incineration and that we salvage materials appeals to them, as does the fact that we capture CO_2 from flue gases and are constantly searching for possibilities for becoming more sustainable. We make an impact with these unique characteristics. The recommendation is to highlight that strength more in our recruitment. We're going to focus on that in 2025.

Staff satisfaction survey

In 2024, we had our Staff Satisfaction Survey (MTO) carried out by Effectory for the first time. A total of 58% of employees took part in it. AVR scored an eNPS of 9. In the top three high scores was the question, which score an 8.3, whether the person wanted to keep working at AVR for the next two years. The next two plus points are the freedom to organise their own work and to dare to openly speak up about an error. This shows that there is great commitment among the staff and the people feel safe. Possibilities for improvement can be found in making better use of employees' ideas and suggestions, in collaborations and in safeguarding equal treatment of everyone.

Benchmarks were immediately created with the industry and our sector with the outcomes of the MTO. Our eNPS is slightly lower than the sector average.

Inflow and through flow

AVR was privileged to welcome 92 new employees in 2024 and 69 employees left employment. Of those, 52% left at their own request. The remainder of the outflow was down to retirement, early retirement or dismissal.

At AVR, we aim to facilitate through flow of employees. Every year, we join the managers in looking at which potential our employees have. With the help of what's known as the nine grid, we recognise talented people in whom we invest and to whom we pass on unique knowledge. They are often potential successors to managers. We will be applying this intervention twice in 2025. We encourage managers to take an active role in this, because they have a certain responsibility for the retention of talent. We will be applying this intervention cross-department to get a broader scope. In this 'inspection', talent, competences and ambition weigh heavier than diplomas.

Internship

In 2024, AVR offered 16 interns a place at the company. It's important to us that we let young people get work experience in the form of an internship. And interns are also important to AVR, because they're potential employees. We maintain close contact with schools to get interns to commit to us. We visit schools to talk about AVR and our work, find new interns at the 'Internship Market' and word of mouth also generates positive responses. Our interns also count for the Social Enterprise Performance Ladder (see below).

ESG remuneration

Since 2024, a certain percentage of the bonuses paid by AVR to employees has been related to ESG goals. Things like taking the compulsory training session and walking a fixed number of VORs are included in the bonus scheme. In addition, there is an individual bonus possible for specific ESG-related achievements. By linking these bonuses to ESG-related KPIs, we are contributing to a higher safety awareness.

Social Return

AVR is keen to fulfil a social role for people with a distance from the employment market. We use the Social Enterprise Performance Ladder (SEPL) to demonstrate our position in this. The SEPL is the scientifically substantiated quality mark of TNO (Dutch research organisation) that objectively measures and makes comprehensive the degree of social enterprise. In 2024, we were easily on the first tread of the SEPL. That means that AVR performs above average in helping people with a vulnerable position in the employment market to find a job, in a sustainable and qualitative way. A new audit will follow in February 2025. We're hoping to be promoted to the second tread. In the last reference year (from 01-10-2022 through 30-09-2024) AVR employed 38 people from the target group.

Our effort for society

As well as processing waste, recovering raw materials and producing energy, AVR also contributes to society in other ways. For example, through our AVR Perfect Days. A Perfect Day is one on which everything goes well. It's a day without accidents, incidents, unscheduled stoppages and overruns, and a day within budget, with a good throughput of waste and a high energy yield. For every Perfect Day, AVR puts 100 euros in a jar. With that money, we support four good causes throughout the year.

In 2024, the impact of AVR Perfect Days was limited. That's because they are also linked to the throughput and the operational process, which stopped in Rozenburg until 1 October 2024. So there were almost only Perfect Days to be generated at Duiven in 2024. The results of the AVR Perfect Days at Duiven were more or less comparable to those of previous years. Duiven had 167 Perfect Days in 2024, amounting to 16,700 euros in the jar. We decided to divide it among the four good causes we support with this programme.

But 2024 was an exceptional year. We will be continuing to commit the AVR Perfect Days for society and the good causes. Because the operational process in Rozenburg will be back to normal in 2025, we expect that the number of Perfect Days will increase again.

It's a sign of appreciation that the square is named after me

Teun Kalle
Team Leader Reliability Engineering

"I started work at AVR as an electrician in 1987. Even back then, I liked the fact that the work was never the same two days running. I was given a lot of freedom to manage my work. Great. Not too much control, I'm not so good with that. Personally, I like to hear younger colleagues' ideas, because they look at things differently. You can learn from that.

At the end of the 1990s, I became group leader of the Service department, after that I moved to Automation and then in 2005, to Engineering when I've been Chief since 2011. It's never dull, that's the charm of AVR. Only the Christmas week is without surprises. But I would get bored if I had to do the same every day.

I don't spend much time now on my official position – keeping the availability of the installations up to scratch - because with a team of engineers, we're mainly busy on the reconstruction following the fire. There's a lot to be organised before you get everything going in the right direction for the big picture.

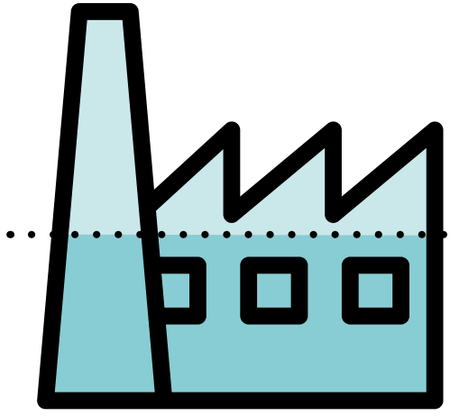
The electricity facility was lost to the fire. We had to think fast about where the new facility should be. By coincidence, we had made a plan six months earlier for a space to charge e-filters from the ovens. It was to be situated on a car park. We claimed that square for a space with generators and facilities for the reconstruction. A lot of engineering was needed for everything we want to connect. And we work with many disciplines at the same time on tiny bits of the site. We get in each other's way sometimes. For example, a large crane had to be on the road just as we were laying cables under it. Coordinating plans with each other isn't always easy, but I like out-of-the-box thinking. And together with the whole team, it all works out well in the end.

Colleagues hung a sign up on that square - it's now called Teun Kalle Square. It took some getting used to. At first, it made me feel a bit uncomfortable but now I really like that appreciation.

I take my hat off to what AVR and all the contractors realised within a year. No other company could have done it. Contractors and visitors are amazed at what's been built here. Everyone worked really hard on that. The great thing is: I don't have to motivate anyone, and that's super."

Responsible supply chain

Our partners want certainty about AVR's continuity. For example, our waste clients have to be able to count on their waste being processed according to the agreed contract and our energy clients have to be able to count on AVR energy being supplied according to the agreements made. The energy production is dependent on the availability of our waste processing installations.



Incinerator availability

44.6% - 27.9

2024: 44.6%
2023: 72.5%
2022: 90.1%

Reliability of heat and steam supply

32.7% - 46.4

2024: 32.7%
2023: 79.1%
2022: 99.0%

Availability of installations

Given the events at Rozenburg – the fire and the reconstruction - availability of the installations in 2024 was not the major parameter.

Supply security of waste

When it comes to the purchase of waste, our supply security was at a high level in 2024. That's quite an achievement, since the waste incineration installation (AVI) at Rozenburg was out of operation. The success was due to the efforts of AVR and its many partners to find solutions for the waste generated, for example having it processed by other waste processors at home and abroad and buffering it on landfill set up for the purpose. For example, we were able to store some of our waste at Attero and waste was processed in Scandinavia. As agreed, several customers sought alternative solutions for part of their waste in 2024.

Reliability

Because we offered our clients alternatives for the stoppage at Rozenburg, reliability was solid. We achieved that not only with those alternatives, but also with the help of the new steam plant.

Energy supply

In 2024, AVR produced more electricity and consumed less than was previously budgeted for. As a result, we supplied more net electricity to the grid.

Less electricity was needed for our business activities at Rozenburg, since our production there was partially suspended. In addition, there were various emergency power generators in operation in places where the internal electricity infrastructure had not yet been fully restored. The supply of process steam through the NetVerder steam pipeline was resumed on 28 November 2024. That was two months later than expected which is why the supplies of steam were lower. The total supply of district heat at Rozenburg was lower because less industrial residual heat was available. That was due to a contract for the waste water treatment in the WT installation was prematurely ended as a consequence of the fire. In collaboration with Warmtebedrijf Rotterdam, AVR supplied around 170,000 GJ of heat from the temporary gas-fired auxiliary boilers.

Energy production and supplies at the Duiven location were in line with expectations. Supplies of district heat and steam remained slight lower, which meant that electricity production was higher. Damage occurred to the vanes of one of the three steam turbines at Duiven. So the rotor had to be transported to a specialised workplace. That led to a two-month stoppage of the turbine. We tried to mitigate this unplanned stoppage - and with that the loss of electricity production - as much as possible with regular maintenance of our waste incineration lines. But without this unscheduled stoppage of the steam turbine, the electricity production would have been higher.

Expectations

In 2025, we expect to be able to give our clients the good news that we are fully operational again. That will still take a lot of time and attention.
In addition, we will keep working on solutions that are important to our clients: reducing to zero the pressure that processing waste puts on the environment and where possible, even achieve CO_2 neutrality. In that context, AVR is in talks with the central government about tailored agreements for speeding up the making more sustainable of waste processing (see Chapter B, Energy).

We're proud that we managed to hang on to our clients

Roger Kremers
Manager International Sales & Services

Viktoria Spaans
Controller

Roger: "I have final responsibility for the Sales and Services department, and with that for the input from AVR installations."
Viktoria: "I've been working at AVR for a long time, as a controller. I've grown with the company and learned a lot, certainly last year!'
Roger: "Challenges and circumstances that demand adaptability - I find that interesting. The fire in September was one. Obviously it was terrible, but it certainly wasn't boring. After the fire, we immediately informed all our clients, but at that time we didn't know how long it was going to take. You could say: sorry, this is out of our hands. But that's not how AVR works. We went in search of alternatives, because our priority was not to have waste piling up in the streets. And we didn't forget commercial waste either. We had to think rethink everything: instead of processing waste, we had to store it, and from being a waste import company we became a waste export company. We had to organise everything fast, together with the Logistics department: bringing in transport companies and shipping companies, organising ships, baling waste... Around 80,000 tonnes was shipped off to six parties abroad. In the meantime, waste continued to be produced by municipalities and businesses."
Viktoria: "I had to note down everything Roger is describing and make reports of it. The existing models were no use, thanks to these changes. I started with a blank sheet, as though a new company had been founded. I had a completely different job from one day to the next. That takes creativity and resolve, plus you get to know new sides to yourself. That's a great experience. To be able to record agreements, I interviewed people from Sales. The insurer and the banks wanted to every little detail and we had to know the financial consequences of every decision. The collaboration between Customer Services and the planner intensified. The great thing was that helped each other and said: we'll get there."
Roger: "Few people believed that we could restart within a year. We're proud that we succeeded in that as a company and that our clients remained faithful to us even if we're not quite there yet."
Viktoria: "I won't have a celebratory party until the insurance claim has been settled satisfactorily and the 2024 Annual Report has been approved. That'll keep me busy for a while."

ESG

Governance

Interaction with each other on our sites

Political Engagement and Lobbying Activities

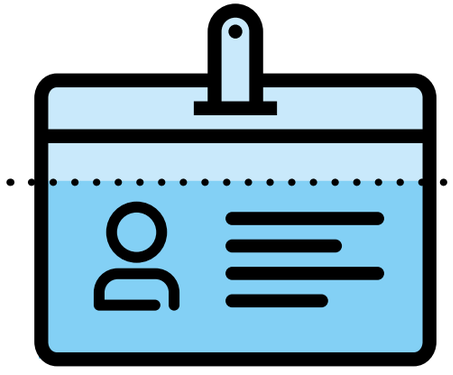
Risk Management

Corporate Governance

Interaction with each other on site

Contractors at our locations

One material theme is the way in which we interact with the contractors on our sites who work for us, sometimes briefly, other times for longer. Ensuring their safety is just as important as ensuring that of our permanent employees. We apply various measures for that.



IF rate* (non-employees only)

2.9

2024: 2.9
2023: not measured
2022: not measured

TRIF rate** (non-employees only)

11.6

2024: 11.6
2023: not measured
2022: not measured

* IF rate (Injury Frequency rate) is the number of accidents resulting in sick leave per million hours worked (throughout the calendar year). For more information about the IF-rate and TRIF-Rate, see the 'Safety and well-being' chapter on page 92.

** TRIF rate (Total Recordable Injury Frequency): the ratio of the number of recordable injuries to the number of hours worked.

Safety for contractors on our site

On our sites, there are permanent employees at work, and also many contractors. Contractors are people who carry out work for us that we can't do ourselves or for which we have too few employees. This might include work activities at height, erecting and inspecting scaffolding or checking installations. During the reconstruction after the fire at Rozenburg, there had been and were still numerous contractors at work on our site. AVR is also responsible for the safety of these people, just as it is for the safety of its own employees (See the chapter on Safety and Wellbeing for more information about this).

Every contractor, when they first arrive on an AVR site, is given an introduction and shown a safety film. This is a precondition to receiving an entry pass. In 2024, we did random testing to ascertain whether everyone had seen the film. We found no irregularities.

Our rules apply to everyone who enters our sites - our own staff, contractors, suppliers, clients, visitors, students and schoolchildren. The standard for interaction with each other is the same for everyone. At the end of the day, everyone goes home safe and sound. Naturally, we don't expect all visitors to have obtained the right safety certificates. In such cases, we assign some of our own staff members to make sure that everyone wears personal protection equipment and sticks to the safe walking routes.

Contractors can also report potential safety incidents in the Ultimo registration system, which also records reports from the VORs. This is how we safeguard equal treatment of employee and contractor. We're preparing for a greater role in what's known as the task supervisor. We started up this programme in 2024, but will be completing it in 2025. It gives more responsibility to staff members who have allocated a task or job to employees and externals who come on our site.

We expect that the task supervisors will be able to identify any abuses between or by contractors and externals that don't get reported or stay under the radar and still be reported so that we can take appropriate action.

Extra safety measures

We took various measures to safeguard the safety of contractors during the reconstruction work at Rozenburg.

Firstly, we made sure that the safe walking routes were clearly marked. Designating them was a puzzle, because a lot of work activities were taking place in a relatively small area, so there were a lot of people present. There was even a period when it was compulsory to wear personal protection equipment on all routes. As work locations for various staff functions are spread across the site, frequent movement was required, demanding significant attention to logistics and safety.
We deployed traffic controllers, both on our site and on the surrounding Professor Gerbrandyweg. That enabled us to make sure that everyone could get safely from one place to the other outside the site. The fire burned in the former energy hall, which was in the centre of our site. The fire brigade marked the hall as a restricted area: nobody was allowed to enter the building because of the danger of collapse. Everyone complied with that. There were also many temporary portacabins and emergency generators on the site during the Phoenix Project. Although the presence of those objects with their cables and pipes restricted freedom of movement, no unsafe conditions occurred because of them. We also made a part of the car park on the corner of Professor Gerbrandyweg and Torontostraat available for contractors' portacabins and amenities.

Code of Conduct

Our rules of behaviour, in the Code of Conduct, apply to everyone on our sites. The code is handed to every supplier and can also be found on all our portals and on our website. This helps prevent misconduct in interactions with one another. There is zero tolerance for bullying, discrimination and racism, and for other unethical behaviour such as corruption. We reviewed our Code of Conduct in the fourth quarter of 2024. It now puts more emphasis on safety for contractors. We will put this reviewed version of the Code of Conduct into force in 2025.

Contractor Safety Meetings

There are periodic contractor safety meetings at Rozenburg, attended by all major contractors. In open dialogue, safety, suggestions for improvement and interaction with each other are discussed. We conclude with a physical tour of the site. Meetings always yield the necessary points. AVR takes this input very seriously and tackles those points. We give feedback at the following meeting. Attendance at the meetings is always very good.

They only take place at Rozenburg. Our location in Duiven is smaller and the lines between employee and contractor are shorter, so such meetings are not so necessary there. The groups of staff are even smaller at the transfer stations: sometimes only five employees per team.
So the supervisor has a greater responsibility for addressing abuses and initiating the dialogue with contractors. There are also far fewer contractors at work there.

We suddenly went from being a waste processor to a logistics company

Peter Tjallema
Logistics Coordinator

Oscar van Vuuren
Account Manager Sales

Bram van Opstal
Manager for Authorities

Peter: "All three of us work in the Commercial department. Bram works with municipalities, Oscar maintains relations with suppliers of non-municipal residuals and I'm responsible for controlling the waste. Since the fire, we've been working hard to organise the external logistics.
Bram: "After the fire, some 700 trucks a week had to take the waste somewhere else. We organised that with a team, together with the Logistics department, that organises everything internally. Peter is the linchpin that keeps the overview."
Peter: "We organised the transport to buffer locations and end-processors. It was hectic at first, but it gradually became more structured. However, the distribution channels could change from one day to the next, depending on the processing capacity of industry colleagues. If they had an incident, for example, we had to divert. And if the licensed buffer volume was reached, we had to go somewhere else, which requires a permit. We also exported waste. Three times a month, for example, a ship sailed to Scandinavia. And there are still barges waiting in the port of Rotterdam."
Bram: "In October, lines started operating again and since the beginning of 2025, we're standing on our own two feet again. The external distribution stops and we process contracted Dutch waste. At the same time, we'll be retrieving stored waste. We have three years to process that."
Oscar: "That's a complex puzzle that takes strategic long-term decisions. We're going to reduce the import. But we have responsibilities abroad too. And we don't want to lose the foreign clients later either, so we're trying to keep everyone on board. We're proud that we managed to keep the collection of household waste going. Suppliers of commercial waste often have other possibilities for distribution but municipalities have no alternative. We also have a social responsibility to solve that."
Peter: "Before the fire, we didn't have much to do with the transport world, but suddenly we went from being a waste processor to a forwarder, transporting large volumes every day. We entered into new collaborations with transport companies that started transporting only waste. Those good relationships form a solid basis for the future, because the waste has to be brought back too. Plus, our knowledge of waste logistics has been expanded. That's an advantage."

Political engagement and lobbying activities

A voice in politics and debate

Our activities are affected by legislation and regulation and decisions made at a European level. Based on our knowledge and desire to become more sustainable, we try to influence those. We often agree with new legislation or even cheer it, but sometimes laws and rules seem to get in the way of our chances of becoming more sustainable. When that happens, we make our voice heard, sometimes in a formal structure and sometimes on our own initiative.

Memberships in Industry Associations*

€ 355,000

2024: € 355,000
2023: niet gemeten
2022: niet gemeten

* Including lobbying and advocacy in the Netherlands and Europe.

AVR in dialogue

We exercise our influence on political decision-making in a number of ways, and get involved in the debate on which rules are useful and correct for the reduction of the emissions. We describe the most important initiatives that AVR is affiliated with.

CEWEP

AVR is affiliated with CEWEP, the Confederation of European Waste-to-Energy Plants, through the Dutch Association of Waste Companies (VA). CEWEP represents 410 waste energy plants across 23 European countries, covering more than 80% of the total capacity.

CEWEP focuses actively on European environmental and energy legislation that could influence the waste incineration sector by:

- maintaining close contact and coordinating with European organisations
- careful analysing of and proactive contribution to the EU environmental and energy policy
- taking part in external studies (UNEP, OESO and EU)
- carrying out its own scientific studies, such as a Life Cycle Analysis, research into the composition and recycling of bottom ash etc.
- company visits, congresses, organising workshops and debates, often at the European Parliament, to further inform policy makers and public of the importance of a well-functioning waste chain, including incineration.

CEWEP recently presented a roadmap which describes how our industry can achieve negative CO_2 emissions. AVR's ambitions are in line with that roadmap. CEWEP also takes the lead in providing information for the European Impact Assessment that will be completed in 2026 to assess whether the waste sector - including specific waste incineration plants - can and should be included in the EU-ETS emissions trading system.

Round Table Advanced Waste-to-Energy Facilities

In addition to the European representation of interests with CEWEP, AVR also collaborates with a German and an Italian waste processor so it can work in contact with the European organisations on proposals and amendments in legislation and regulations so that waste processors can contribute effectively to the reduction of landfill of flammable waste in Europe and retrieve raw materials and energy from waste.

The Dutch association of waste processing companies

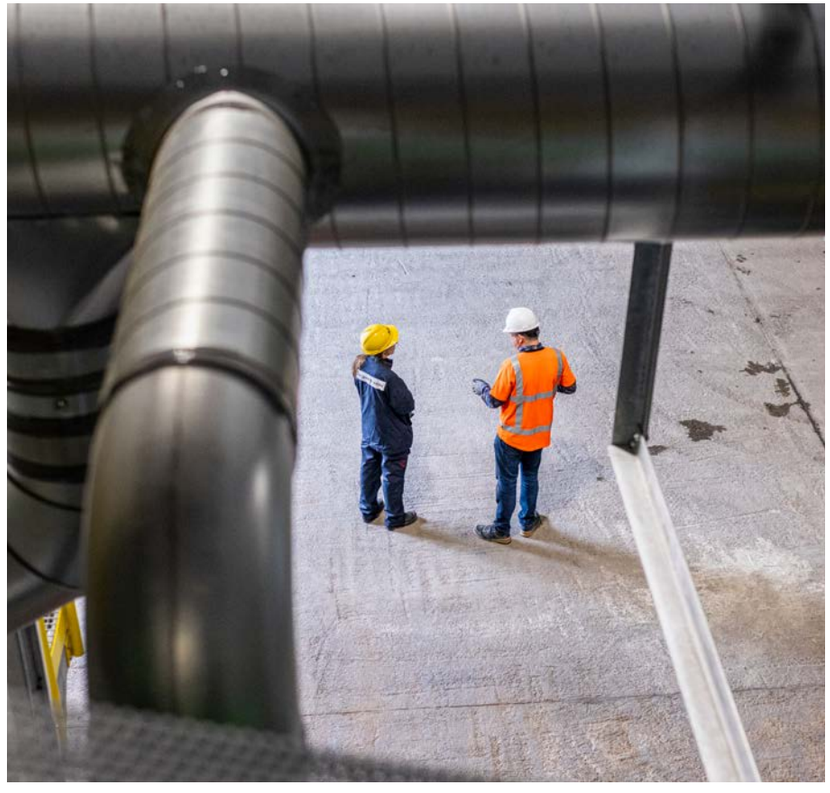
The Dutch association of waste processing companies represents the entire Dutch waste chain. The association has more than 50 members who together process some two thirds of the whole volume of Dutch waste. The members work on prevention, collection, transport, sorting, cleaning, processing, recycling, composting, fermentation, sewer management, incineration and landfill. AVR is a part of the Energy from Waste department. We actively contribute to the various workgroups in order to safeguard a level playing field for our sector in the Netherlands. In 2024, the association focused a lot on the problem for waste processors of laughing gas cylinders. This is about the dangers for staff, but also about the costs waste processing companies are faced with now that large numbers of these cylinders are landing up illegally in the residual waste.

In addition, the association is attempting to get a better framework for action, by means of lobbying, for the increase in the CO_2 tax announced for our sector and if that is unsuccessful, to have it taken off the table.

"Waste Greeners"

AVR collaborates with a number of Dutch processors (Attero, EEW) in the "Waste Greeners". Our aim is to share an honest, fact-based narrative about waste incineration, salvage of raw materials, reduction of CO_2 and the generation of energy.

The "Waste Greeners" publish articles and newsletters throughout the year to back up this narrative. Another aim is to have good contact with the Dutch policy makers. It isn't easy to reach policy that makes a powerful contribution to achieving the circular goals, significantly reducing the Netherlands' CO_2 emissions. Through the "Waste Greeners", AVR stays in touch with several ministries, members of parliament and research institutes, to reach effective policy measures.



As long as laughing gas cylinders are a problem, we'll keep prodding

Dylan Bos
Chief Operator, Rozenburg

"I came to AVR in 2012 to do an internship and after one year, started as Second Operator. Now, as Chief Operator, I manage a team of 19 operators. We solve malfunctions and switch off lines for repair and replacement. I am the walking encyclopedia and facilitator for my team. I really enjoy my work.

One big problem in waste incineration is laughing gas cylinders. Since the deposit system was abolished early in 2023, when recreational use of laughing gas was made illegal, they are thrown away with the rest of the residual waste, dumping the problem on waste processors. We do remove a lot of cylinders manually from the waste, making it slightly better than it was at first, but it remains a problem. If one of those things lands up in the incineration oven, you hear a dull thud and it turns black in the boiler. Not only does it cause significant damage, it's also dangerous. And safety is paramount for AVR employees.

I'm an executive member of the FNV union for our sector, where I raised this issue, together with an ex-colleague. We then initiated a campaign that people from other waste processing companies joined. We need to join forces in this. From the FNV, we wrote to the Ministry of Infrastructure and Water Management. We handed over a petition to the commission responsible. We took a laughing gas cylinder with us, and they said: goodness, are those things that big? It seemed as though they didn't really understand the exact issue. We were subsequently invited to take part in a round table discussion. They said they thought it was terrible, but afterwards, we didn't see much in the way of results. They may well be working on it in the background, but in the meantime, we'll keep prodding to get some action in it. The Dutch association of waste processing companies is also working on it, at board level.

I think it's important to be a union member. I'm also on the Works Council, so I can have a vote and pass on concerns from the workplace. Few people dare to speak up, but I do. It's a pity there isn't more support for it. It used to be that everyone was a member of the union, but nowadays they think: it gets sorted for me anyway. I find it important enough to put time and effort into it."

Risk management

Managing risks

AVR operates in a field that is susceptible to risks, both commercial and financial. Take for example the availability of substances and materials, changing legislation and regulations and shortages in the employment market, in addition to the financial risks. We aim to anticipate such risks as far as possible and we take measures to be able to manage them.

New approach to risk management

An element in the CSRD is establishing the Impacts, Risks and Opportunities (IRO). For AVR, this has led directly to a different approach to our risk management.

Previously, we reported on ten financial material topics. That's a selection from 26 topics that are the most material for AVR. Those topics are a result of the Enterprise Risk Assessment, the ERA. However, they are solely financially driven. We decided not to make a separate ERA, as prescribed by the IFRS and other management systems, and a separate IRO as prescribed by the CSRD, but rather to integrate the two. We shelved the 26 financially driven themes and instead, made the 18 sustainability themes that emerged from our double materiality analysis leading. To that end, we took some significant steps, including organising the stakeholders' day on 6 June 2024, where we talked about our material topics.

IRO: Impact:

As prescribed by the CSRD, we have calculated the impact (I) of the sustainability themes - this is the score reflected in the double materiality analysis - and researched what this involved. We weighted the impacts. We carried out this research both internally, in the organisation, and externally: we assessed it during a feedback session with our external stakeholders.

IRO: Risks

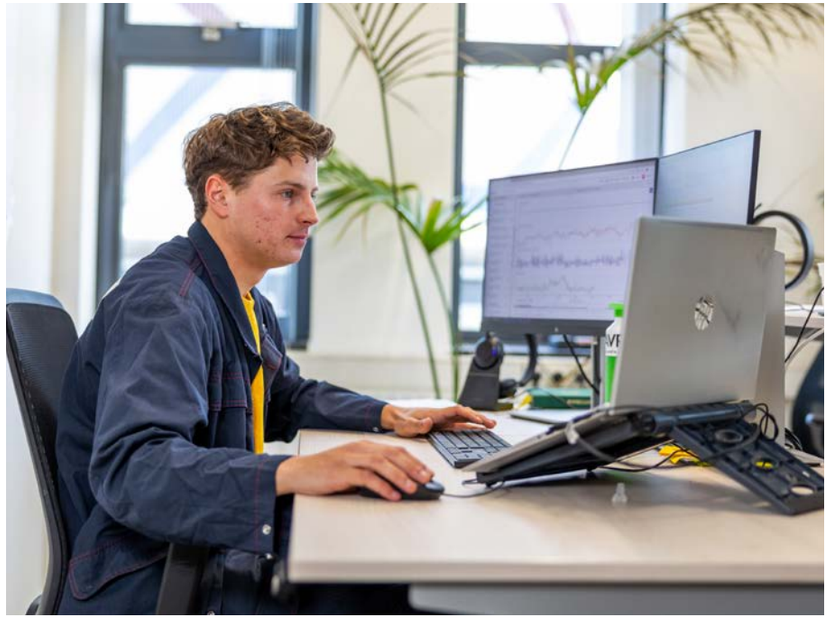
We carried out the same exercise for the risks (R). In the classic financial risk assessment, the financial risks are examined closely. We still did that, not with the 26 financially driven themes but with the 18 sustainability themes. We fully integrated the former 26 ERA topics into the 18 topics that are material for AVR. To do so, a template plotting the 26 potential risk topics was developed for the IRO. That way, we ensured that both all 26 of the ERA topics and the 18 sustainability topics known to AVR can be frozen.

IRO: Opportunities

As an organisation, you want to seize any chance you get to operate more sustainably. We haven't yet completed that element. We had combined the IRO Opportunities with mitigating financial management rules prescribed by the ERA, but that wasn't the right approach, since the audit measures must stay separate from the opportunities. That way there are four groups: impact, risk, audit measures and opportunities.

Process

In 2025, we will continue with the disconnection of the opportunities from audit measures, and record the complete IRO across the financial year 2025. We go through the IRO twice a year with the internal stakeholders. In 2025, in much the same way as we assessed our material topics, we aim to verify all IRO with our external stakeholders.



Risks

Commodities

This is the risk that AVR will suffer losses as a result of the volatility of commodity prices (electricity, gas, diesel and metals). This risk applies particularly to the prices of the energy and residual materials supplied by AVR. We operate an active hedging policy, intended to cover at least 80% of the raw material price risk for one year ahead through hedging contracts and 40% of it for at least two years ahead. This policy is included in the financing conditions that AVR has agreed with its banks and investors.

Financing

This concerns the risk that AVR will be unable to grow enough, because of insufficient financial resources (in both the short and long term) or be able to meet the business goals set. It's a risk that decreased in 2024, due to the fact that 300 million euros in insurance payouts had already been agreed with insurers and further claims on the insurance will be made in 2025.
In addition, AVR has received a financial impulse from its shareholders. Thanks in part to that, we retain sufficient financial resources to rebuild our earnings capacity, with the help of the Phoenix Project.
In 2024, AVR also reached a new agreement with banks for a revolving credit facility.

Also, some of the long term debts that expired in 2024 have been replaced by new loans with terms of seven to ten years. That way, we have reduced our financing risk.

Price risk

This is the risk of price fluctuations on both the sales (energy and waste) and purchasing sides. A hedging policy is applicable for commodity prices. For energy prices, AVR reduces their dependence on counter parties by working with at least three different brokers. The risk related to waste prices is limited because AVR has many long-term contracts with fixed price agreements and indexing.

Due to inflationary pressure, prices rose sharply in 2024 on the procurement side. AVR mitigates this risk through 'supplier management' and entering into sustainable relationships with suppliers.

Interest rate risk

This is the risk of interest rate fluctuations. On the basis of the financing documentation with banks and investors, AVR may not have more than 25% variable interest. At the end of 2024, AVR had more than 349 million euros in outstanding loans, of which only 69 million euros with a variable interest rate and 280 million euros with a fixed interest rate. The interest rate risk on current financing is therefore covered for 80%.

At the end of 2026, existing loans amounting to 125 million euros will expire. Because of the sharp rise in interest rates in recent years, AVR may have to refinance these loans at a higher interest rate.

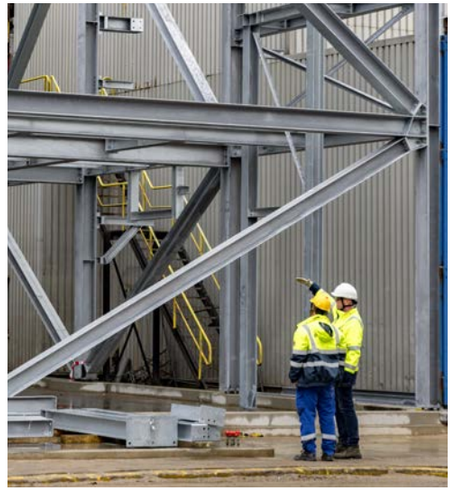
AVR reduces that risk by splitting the total financing requirement into separate parts, each with a different maturity and repayment date. This reduces the likelihood of total interest costs rising sharply.

Liquidity risk

This is the risk of a shortage of liquidity that results in AVR being unable to meet its (immediate) payment obligations, both in the long and short term. The risk is mitigated by AVR's current financing structure, which in the short term gives AVR access to sufficient available credit facilities and in the long term limits the refinancing risk by splitting the total financing requirement into separate tranches, each with a different maturity.

Currency risk

AVR doesn't carry out large transactions in foreign currencies. Also, we have agreed in our financing documentation that all currency risks must be fully hedged. That means this risk is very small.



Investors complimented us on our approach

Paul van Loon
Manager FATT & Financial Support

"I started work at AVR in December 2023, just after the fire. Several financial disciplines come together in my job. That in combination with the size of AVR, makes the job both interesting and challenging for me.
My first task was to write the 2023 Financial Statements. There was a lot of uncertainty among stakeholders, such as banks and investors, and our auditor had questions about the future. We made matters transparent to all parties involved as quickly as possible and shared our plans. The goal was to start up three lines of the Energy-from-Waste plant on 1 October, and we never wavered from that. We issued monthly updates to banks and investors to retain their trust.
In that difficult period, we still managed to meet the financial ratios for financing. Our credit worthiness was closely examined and with our plan for the reconstruction and the recovery of earnings potential, we succeeded in keeping our investment-grade credit rating and the confidence of stakeholders.
AVR has three pillars of financing: shareholder loans, bank facilities and private debt with institutional investors. At the beginning of 2024, our shareholders already supported us with a capital contribution, which was a clear sign that they had our backs. Towards the end of 2024, a large part of our debt had to be refinanced. Despite the challenging times, our transparent attitude and the support of our shareholders resulted in many parties being eager to invest again. Those parties, not normally known for it, gave us their compliments about the way we had tackled the situation. The bar is set high, but the terms and conditions for financing are also important. Our shareholders put us in touch with new parties in their networks, who stepped up. That's very valuable. At the beginning of November, we secured bank financing with a new bank syndicate and the refinancing of private debt was completed in December. Thanks in part to the help of our shareholders, we were able to obtain the refinancing on favourable terms. We're proud of the results we've achieved."

Corporate governance

Governance, supervision and accountability

AVR exemplifies good corporate governance, proper supervision and transparent accountability to all its stakeholders, also due to the social role the company wants to fulfil.

Legal structure

The ultimate holding company of AVR, Dutch Enviro Energy Holdings B.V. (DEEH), is a private company incorporated under Dutch law to which the structure (partially exempt) regime is applicable. On the grounds of this regime, a Supervisory Board was appointed in 2017. AVR applies the Anglo-Saxon model of a one-tier Board in which the Supervisory Board members (or non-executive directors) and the Directors (executive directors) work together in a single Board. The executive directors are responsible for the day-to-day management of the company and the non-executive directors supervise the executive directors.

One-tier board

The one-tier board comprises nine directors: four non-executive and five executive. There were six board meetings in 2024. The annual reports on 2023 were discussed and verified in the meeting on 19 April 2024, in the presence of the accountant. During the meeting on 21 November in Hong Kong, the budget for 2025 was approved.

The Board has formed four sub-committees of its members giving scope for a more in-depth appraisal of specific topics: the Remuneration Committee, the Audit & Treasury Committee, the Sales & Operations Committee and the ESG committee. The members of these committees are directors from the one-tier board.

The meeting of the Remuneration Committee took place on 4 March 2024. The meetings of the remaining sub-committees took place in advance of the board meetings on 26 March and 16 October 2024.

The members of the one-tier Board are CEO Yves Luca, CFO Rob de Fluiter Balledux, six representatives of the shareholders and a non-executive member nominated by the AVR Works Council.

Shareholders

Since 2013 all the shares in AVR have been held by a consortium in Hong Kong led by CK Infrastructure Holdings Ltd. (CKI), a Hong Kong listed company that has also been listed on the London Stock Exchange since August 2024. CKI is one of the world's largest global infrastructure companies that has diversified investments in Energy Infrastructure, Transportation Infrastructure, Water Infrastructure, Waste Management, Waste-to-energy, Household Infrastructure and Infrastructure Related Businesses. Its investments and operations mainly involve Hong Kong, Mainland China, the United Kingdom, Continental Europe, Australia, New Zealand, Canada and the United States. Other shareholders are CK Hutchison Holdings Limited (CKH), Power Assets Holdings Limited (PAH) and CK Asset Holdings Limited (CKA), all of which are also listed on the Hong Kong Stock Exchange.

Personal details

Currently the one-tier Board of DEEH comprises the following members:

Neil McGee
Chair and Non-executive Director

Neil McGee (73), Australian national, joined CK Hutchison Group in 1978, holding various legal, corporate, secretarial, finance and management positions. He is also an Executive Director of PAH. Neil has a Bachelor of Arts degree and a Bachelor of Laws degree.

Hing Lam Kam
Non-executive Director

Hing Lam Kam (78), Canadian national, has been the Group Managing Director of CKI since its incorporation in 1996 and a member of the Executive Committee of CKI since 2005. He is the Deputy Managing Director of CKH, Deputy Managing Director and Executive Committee Member of CKA. He holds a Bachelor of Science degree in Engineering and a Master's degree in Business Administration.

Duncan Macrae
Non-executive Director

Duncan Macrae (54), British national, is Head of International Business at CKI. He has over 30 years of experience in the infrastructure investment field. Duncan is a member of the Institute of Directors, UK. He holds Bachelor's and Master's degrees in Philosophy, Politics & Economics.

Ed Nijpels
Non-executive Director

Ed Nijpels (74), Dutch national, is a former Minister of the Environment and Queen's Commissioner in Friesland and the Chairman of the Progress Consultation Climate Agreement. He is now an appointed member of the Dutch Social and Economic Council (SER). He studied Law.

Andrew Hunter
Executive Director

Andrew Hunter (66), British national, is Executive Director of CKI, Chairman and Executive Director of PAH, and Executive Director of CKH. Andrew is a member of the Institute of Chartered Accountants of Scotland and the Hong Kong Institute of Certified Public Accountants and has over 40 years of experience in accountancy and financial management. He holds a Master of Arts degree and a Master's degree in Business Administration.

Simon Ka Keung Man
Executive Director

Simon Ka Keung Man (67), Australian national, is Executive Committee Member and General Manager of Accounts Department of CKA. He has a long track record within the CK Hutchison Group and more than 43 years of experience in accounting, auditing, tax and finance. Simon is a member of Chartered Accountants Australia and New Zealand. He holds a Bachelor's degree in Economics.

Charles Tsai
Executive Director

Charles Tsai (67), Canadian national, has worked for PAH since 1987. He is Executive Director and Chief Executive Officer of PAH. Charles has been responsible for PAH's investments outside of Hong Kong since 1997. He is a Registered Professional Engineer and Chartered Engineer. He holds a Bachelor of Applied Science Degree in Mechanical Engineering.

Yves Luca
Executive Director

Yves Luca (59), Belgian national, is the CEO of AVR and a member of the Board of the Dutch Waste Management Association. Yves has 25 years of experience in the waste sector. His previous positions included COO of Van Gansewinkel. Yves studied economics.

Rob de Fluiter Balledux
Executive Director

Rob de Fluiter Balledux (61), Dutch national, is the CFO of AVR. Rob's positions prior to joining AVR included Financial Director of Martinair and CFO of Van Gansewinkel. He studied business economics.

Bram Witsenburg
General Counsel-Company Secretary

Bram Witsenburg (53), Dutch national, acts as Secretary of the one-tier Board. Previously, he was attorney-at-law and company lawyer for companies including ARCADIS and McGregor Fashion Group. He studied Law.

Message from the board

It is an honour for me to present the AVR Annual Report 2024, on behalf of the one-tier board.

I look back proudly on a year filled with progress and resilience at AVR. After the fire in 2023, the company has succeeded in going back into operation. AVR strives to once again be a forerunner in delivering smart solutions for waste management and converting waste into valuable energy.

For me, the most important milestone this year was without a doubt the successful restart of the incineration lines at Rozenburg after the fire in 2023. A remarkable achievement made possible by the tremendous dedication and expertise of AVR's people. By putting these essential assets back into operation, AVR was able to restore the capacity for efficiently processing waste for clients and delivering sustainable energy to the clients it serves.

In addition, AVR received a substantial advance from the insurance company as part of the compensation for the fire damage the company suffered in 2023. This financial support, together with an infusion of capital by investors, played a major role in stabilising activities, accelerating the recovery efforts and safeguarding the financial result in 2024. Our aim is to round off the total insurance claim in the course of 2025.

AVR continues to optimise processes and develop new technologies that contribute to a cleaner, greener future. The company aims to further strengthen its position as a significant player in the circular economy and to reaffirm its commitment to reliable energy and waste management services.

In 2025, AVR remains unwavering in its pursuit of a sustainable future. In the last quarter of 2024, we were able to resume the supply of steam and heat at almost the level it had been before the fire. The aim is to be fully operational again by resuming the supply of electricity to the net through two brand new energy-efficient turbines by the end of 2025.

On behalf of the Board, I would like to offer my sincere thanks to all staff, partners, clients and shareholders of AVR for their trust and support during this transformative year. Together, we will continue to pave the way towards a cleaner, more sustainable future.

Kindest regards,

On behalf of the Board,
Neil McGee, *chairman DEEH*

Compliance

AVR's Directors and shareholders set great store by the correct adherence to the applicable legislation and regulations. To safeguard this compliance, the organisation has drawn up internal policies and procedures for its operating processes. Compliance is a continuous process of improvement, certainly given the increasing regulatory pressure and its complexity.

A number of spearheads in the area of compliance apply to AVR: compliance with environmental law (licences), public procurement law, accounting law, energy law, consumer law, financial law and privacy law.

Compliance with the legislative fields mentioned above has direct consequences for AVR's 'licence to operate'. Preventing fines and other enforcement measures is also essential, to maintain the Company's good reputation. The SHEQ (Safety, Health, Environment and Quality), IT and HR departments and the General Council support the organisation and its operations with solicited and unsolicited advice and, when necessary, the knowledge required.

AVR is committed to a good ESG policy ESG stands for Environmental, Social, and Governance as part of the Corporate Sustainability Reporting Directive (CSRD). As of 2025 and on the basis of the CSRD, AVR, as a large company, will have to communicate its sustainability policy and the results achieved. With the integration of the CSRD directive, large companies are obliged to report more transparently on the impact of their policies and activities on people and the environment.

Safety, Health, Environment and Quality (SHEQ)

In 2024, AVR successfully completed the interim ISO audits for the ISO 9001 quality management system, the ISO 14001 environmental management system, the ISO 45001 health and safety system and the interim audit for the ISO 50001 energy management system.

In the annual COMAH (Control of Major Accident Hazards directive) inspection at Rozenburg in 2023, five infringements were noted. They were all dealt with in 2024, with the right measures, approved by the inspectorate and with that, settled. The COMAH does not apply to Duiven.

Integrity

Integrity is an important theme for AVR. Our Code of Conduct demonstrates which rules of conduct we have at AVR, so that everyone is aware of which behaviour is acceptable and which is not. This provides clarity and a pleasant working atmosphere. There is a specific Code of Conduct for our contractors too.

To safeguard integrity within AVR in general and compliance with the Code of Conduct in particular, we regularly organise training sessions for our staff. Using concrete examples from daily life, they are trained to deal correctly with misconduct, including corruption, inappropriate behavior, discrimination, and theft. The training sessions are compulsory and help our staff to act with integrity at all times.

Participation

In the Works Council too, 2024 revolved around the reconstruction - the Phoenix Project. The project director kept the Works Council updated on both the progress and the finances. The Works Council also held consultations with the CFO about the financial situation and the refinancing of AVR. When the first three lines were put back into operation at the beginning of October, this was celebrated modestly with drinks, with both staff and contractors, all of whom had done so much work.

The Works Council consulted twice with non-executive board member Ed Nijpels. They talked about the influence of politics on our sector and the consequences of that for AVR. Take for example the CO_2 tax and the levy on waste.

The Works Council also consulted with Neil McGee, non-executive member and Chair of the one-tier board. They discussed with him the future of AVR following the fire, its financial impact and shareholder confidence in AVR. The Chair indicated that the CKI "family" also supports AVR in difficult times. That gives confidence for the future.

The safety campaign "The AVR Eight" has started. There has been a proposal for the NEN Safety Culture Ladder to be deployed. That would make AVR's stance on the development of the safety culture transparent. The Works Council is involved in this, through the VGWM Committee (safety, health, well-being and environment). The intention is to organise a workshop, aimed at introducing the organisation to the Safety Ladder. The VGWM committees have started up at both locations, following the necessary training and support.

There are now regular meetings with the SHEQ department and management at both locations.

Requests for advice:

- Temporary extra financing
- Changes to structure site management at Rozenburg and Duiven
- Changes to SHEQ department
- Refinancing AVR

Requests for assent:

- Changes to OSSU timetable
- Modification balance score card (bonus scheme)
- Application Early Retirement scheme
- Temporary change smoking policy Rozenburg
- Changes to logistics timetable Rozenburg (not submitted)
- Changes to weighbridge timetable (not submitted)
- Addition to health policy
- Training policy and matrix
- Hybrid working policy
- Changes to intern remuneration
- Popay Learn
- Temporary changes to mechanical engineering timetable
- Changes to Special Occasions scheme
- Company car scheme
- Whistleblower scheme
- Evaluation and Employability process (assessment component)
- Visits policy

Background to the figures

EBITDA
(in millions of €)

187.8 +118.7

2024: 187.8
2023: 69.1
2022: 150.8

Net result
(in millions of €)

88.0 +187.7

2024: 88.0
2023: -99.7
2022: 46.3

Turnover (including other revenue)
(in millions of €)

511.6 +219.3

2024: 511.6
2023: 292.3
2022: 352.4

Cash flow
(in millions of €)

-5.4 -50.4

2024: -5.4
2023: 45.0
2022: -7.9

EBIT
(in millions of €)

150.1 +254.4

2024: 150.1
2023: -104.3
2022: 93.3

Cash position
(in millions of €)

61.8 -5.4

2024: 61.8
2023: 67.2
2022: 22.2

Investments
(in millions of €)

174.0 +96.7

2024: 174.0
2023: 77.3
2022: 67.4

Financial stability

We define financial stability as a solid financial basis which guarantees that AVR can continue to exist, is profitable, can make strategic investments and can absorb unexpected set-backs. We have budgets for our goals and KPIs approved by our regulatory body. Those KPIs are driven by our activities, which we have described in the other sections of this Annual Report.

The consequence of the fire

The results and financial position here in the 2024 Annual Report are still heavily marked by the fire that broke out in our Rozenburg plant on 21 September 2023, meaning that our biggest installation was out of operation for a whole year. On the one hand, we have less income because a part of our production was in standstill, while on the other hand, expenses were higher, due in part to finding a solution for the waste flows, extra costs as a result of the fire and the significant investments in the reconstruction of our installations. We were able to absorb this setback with our good financial position as a basis and the coverage from the insurance and support from the shareholders, in combination with the cash flow from the operational activities of our installations in Duiven.

Results

A positive net result of € 88.0 million has been realised for 2024 compared to a negative result of € 99.7 million in 2023. The operational outcome (EBIT) is € 254.4 million higher than in 2023, mainly as a result of an insurance payout of € 300 million being included in the 2024 result. The lower production volumes and higher costs resulted in a negative EBITDA effect of € 181.3 million. Furthermore, depreciations on fixed assets were € 135.7 million lower than in 2023.

KPI: Revenue

Revenue (including other income) increased from € 292.3 million in 2023 to € 511.6 million in 2024. Of that increase, € 300 million is from the insurance payout. The revenue from operational activities decreased by € 80.7 million.
The total volumes of waste processed decreased compared to 2023 as a consequence of the stoppage of the installations at Rozenburg and a drop in the volumes delivered for our water treatment plant. The lower volume of waste processed means we also supplied less energy. On the other hand, there was revenue included for the share of the waste volumes processed by third parties.

KPI: EBITDA and EBIT

As well as the increase in income, the operational costs also rose by € 100.6 million, so that the EBITDA in 2024 comes out at € 187.8 million, € 118.7 million more than in 2023 (€ 69.1 million). The higher costs are largely due to the consequences of the fire. There were extra expenses for diverting waste to have it processed by other parties or temporarily stored. And there were costs involved in creating temporary facilities for the processing of fire water runoff at the Rozenburg location.

Due to depreciations that were € 135.7 million lower than in 2023, the operational result (EBIT) for 2024 comes out at € 150.1 million.
The lower depreciations compared to those of 2023 mainly concern the one-time depreciations in 2023 as a result of the fire.

KPI: Cash flow

AVR realised a negative cash flow over 2024 of € 5.4 million. The cash flow contains insurance payouts received to the tune of € 231.4 million and a capital injection by shareholders of € 38 million. The cash flow from operational activities (not including the insurance payouts) was negative for € 75.0 million. Spending on investments came to € 174.0 million. The cash flow from financing activities comes to € 19.4 million, including the already mentioned capital injection. Dividends and the interest on shareholders' loans were unpaid, as a consequence of the fire.

KPI: Cash position

The cash position at the end of 2024 is € 61.8 millions compared to € 67.2 million at the end of 2023.

KPI: Investments

In 2024, AVR invested € 174.0 million compared to € 77.3 million in 2023. Of that € 174 million, € 110 million was for the reconstruction following the fire. The regular maintenance investments in and improvements to the existing installations - such as the new slag transport system and renovated smokestacks at Rozenburg - were also realised.

Financing structure

AVR has a prudent financing structure: nearly 50% of the financing is through equity and subordinated loans from the shareholders. This financing structure is reflected in the relationship between the company's debt and its operating result before depreciation and amortisation (EBITDA) – known as leverage. At the end of 2024, AVR has a leverage ratio of around 2x, - the net debt amounts to approximately twice the EBITDA. AVR strives to achieve the long-term retention of a maximum leverage of 3x.

We renewed our bank facilities in 2024, for a total amount of € 100 million. As of the end of 2024, € 49 million of these facilities have been used. That means that AVR still has unused credit lines that can be tapped into if additional liquidity is required. This shows once again that our strategy is focused on long-term stability, where we can absorb unexpected negative financial effects, such as the fire incident, and invest permanently in AVR's future.

In addition, AVR renewed long term loans for the sum of € 125 million in December 2024. At the end of 2024, AVR's outstanding loans and credit facilities with banks and investors amount to € 349 million. No existing financing expires in 2025.

Condensed financial statements

This is a condensed financial overview. These statements have not been audited. Audited financial statements have been filed with the Chamber of Commerce.

CONDENSED FINANCIAL STATEMENTS

CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS OF 31 DECEMBER 2024 (x € 1,000)

	31 December 2024	31 December 2023
ASSETS		
Non-current assets		
Property, plant and equipment	587,667	445,400
Right-of-use assets	14,393	15,396
Goodwill	316,417	316,417
Other intangible assets	29,542	32,614
Deferred tax assets	35,461	78,497
Derivative financial instruments	–	11,479
Other non-current financial assets	12,200	6,400
Total non-current assets	**995,680**	**906,203**
Current assets		
Inventories	10,352	10,347
Trade and other receivables	106,290	36,227
Derivative financial instruments	4,149	4,467
Prepayments	817	2,354
Cash and cash equivalents	61,800	67,197
Total current assets	**183,408**	**120,592**
Total assets	**1,179,088**	**1,026,795**

CONSOLIDATED STATEMENT OF FINANCIAL POSITION AS OF 31 DECEMBER 2024 (x € 1,000)

	31 December 2024	31 December 2023
EQUITY AND LIABILITIES		
Capital and reserves		
Issued capital	48	100
Share premium	298,317	260,364
Cash flow hedge reserve	2,079	11,696
Retained earnings	(94,914)	4,708
Unappropriated result	88,043	(99,722)
Equity attributable to the parent	**293,573**	**177,146**
Non-current liabilities		
Borrowings	569,100	473,618
Lease liabilities	14,234	15,820
Derivative financial instruments	454	–
Deferred tax liabilities	43,848	61,973
Provision for jubilees	1,052	1,080
Other provisions	19,852	19,459
Total non-current liabilities	**648,540**	**571,950**
Current liabilities		
Trade and other payables	52,550	47,603
Borrowings	48,439	127,104
Lease liabilities	2,825	2,414
Current tax liabilities	11,711	6,064
Derivative financial instruments	893	–
Amounts payable to shareholders	3,966	3,663
Other provisions	26,369	12,374
Other liabilities	90,222	78,477
Total current liabilities	**236,975**	**277,699**
Total liabilities	**885,515**	**849,649**
Total equity and liabilities	**1,179,088**	**1,026,795**

CONSOLIDATED INCOME STATEMENT AND OTHER COMPREHENSIVE INCOME FOR THE YEAR 2024 (x € 1,000)

	2024	2023
Revenue	207,680	292,208
Other income	303,876	66
Raw materials, supplies and energy	(26,693)	(29,938)
Third-party processing	(100,653)	(56,766)
Third-party maintenance	(19,450)	(22,337)
Employee benefit expenses	(58,627)	(50,036)
Depreciation, amortization and impairment	(37,687)	(173,420)
Impairment loss on financial assets	–	(10)
Other operating expenses	(118,338)	(64,099)
Operating result	**150,108**	**(104,332)**
Financial income and expenses	(31,837)	(31,027)
Result before tax	**118,271**	**(135,359)**
Taxes on result	(30,228)	35,637
Profit / (loss) for the year	**88,043**	**(99,722)**
Attributable to: Owners of the Company	**88,043**	**(99,722)**
Other comprehensive income:		
Gain/(loss) on cash flow hedges taken to equity	(12,961)	83,821
Income tax direct through equity	3,344	(21,501)
Total attributable to the Owners of the Company	**78,426**	**(37,402)**

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEAR 2024 (x € 1,000)

	2024	2023
Result before tax	**118,271**	**(135,359)**
Adjustments for:		
– Depreciation, amortization and impairment	37,687	173,420
– Change in provision for jubilees	(28)	34
– Change in other provisions	13,940	3,350
– Financial expenses	31,837	31,027
– Change in other financial assets	(5,800)	(6,400)
– Changes in working capital	(39,465)	39,372
Cash flow from operating activities	**156,442**	**105,445**
Investments in:		
– Property, Plant & Equipment	(180,187)	(71,158)
– Intangible Fixed Assets	(1,018)	(918)
Cash flow from investment activities	**(181,205)**	**(72,076)**
Payment of current lease liabilities	(3,291)	(2,978)
Interest paid	(10,876)	(17,888)
Capitalized financing costs	(2,088)	–
Increase of borrowings	125,000	51,000
Repayment of borrowings	(127,379)	–
Capital contribution from shareholders	38,000	–
Dividend paid	–	(18,500)
Cash flow from financing activities	**19,366**	**11,634**
Net increase in cash and cash equivalents	**(5,397)**	**45,003**
Cash and cash equivalents at 1 January	67,197	22,194
Cash and cash equivalents at 31 december	**61,800**	**67,197**

In conclusion

Looking forward to 2025

We have proactively approached the reconstruction of our Rozenburg facility through Project Phoenix. That resolve led to us restarting operation on 1 October, as promised. In 2025, we will complete the Phoenix Project and make further preparations for the construction of our new CO_2 capture installation.

Project Phoenix will enter its second phase in 2025. We will then complete the new electrical infrastructure and put all incineration lines into operation, and retrieve all the stored waste for processing at last. That can take until 2026 and 2027. In addition, we will be continuing construction on the new turbine hall with two new turbines. We want to have them in operation by the end of 2025, to give us a good start to 2026.

We expect an investment decision in 2025 on replacing two old steam turbines at Duiven with an efficient steam extracting condensing turbine. Thanks to that investment, the electricity production will be significantly increased - if the demand for heat remains stable.

Although we were well-insure and the damage and lost gross profit are covered, the costs of reconstruction have risen greatly. To redress the balance, we will be paying extra attention to cost management in 2025.

A year of non-operation has not been good for the installation at Rozenburg. After the start in October 2024, it turned out that the stability of the line was fragile. The installations are situated in a corrosive environment and re-starting them has consequences. That requires extra attention. We expect that this will require the necessary commitment from us in 2025.

Another important development is the construction of two CO_2 capture installations. We started what is known as a FEED study in 2024, to gain more insight into matters such as the investment and operational costs. The study will continue through 2025, and we expect to be able to make an investment decision at the end of the year. These new installations help us contribute to increasing sustainability, by delivering the CO_2 we capture for storage,

We're seeing that recycling is currently under pressure. Plastic recycling is more expensive than importing virgin material that comes mainly from China and the US and floods the European market. However, we don't foresee that will be the trend in the longer term. Legislation is going to influence this. In 2027, the statutory amount of recyclate that producers must incorporate in their plastics will be increased. And the European requirement that in 2030, all domestic waste must be separated after collection is in the pipeline. For that reason, we are assessing the capacity of our separation installation and increasing it where possible.

In January 2025, the Cabinet presented its policy vision on waste incineration. It covers the decreasing of the incineration capacity and the reduction of imported waste. This seems to form a threat to the sector. AVR chooses not to proactively remove capacity from the market, but rather strive towards optimum use of the existing capacity.

We acknowledge the market dynamic, where the amount of residual waste is decreasing, but we want to remain competitive, with the help of large-scale CO_2 capture and operational excellence.

We will be phasing out fossil fuels as much as possible. That will allow us to meet sustainability goals and also avoid costs, since the taxes on fossil fuels are increasing. We are looking into how we can work more efficiently without those fuels. Our ISO 50001 certification will help us with that.

Our permit for the Rozenburg location is up for review in 2025. We're preparing for higher emission requirements. One example of that is PFAS; we have to monitor our emissions continuously for them, something that wasn't a requirement up till now.

We realise that we've asked a lot of our staff during the last two years. Major, unexpected incidents and their aftermath came with the necessary stress. It's important to return calmness and continuity to the operation. One way to do that is to cut back on unplanned maintenance as much as possible, because it causes stress. We're going to pay special attention to that.

And lastly, an anniversary: AVR opened the Duiven location in 1975. We will be celebrating this 50-year anniversary in an appropriate fashion with our staff.

IN CONCLUSION

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