

RIEDEL Communications GmbH & Co KG Environmental Report 2022



Contents

Introduc	ction		4
		Il Management in RIEDEL Communications GmbH & Co KG	
		uation	
1.1.		stics, production and procurement management	
1.2.		ployee mobility	
1.3.		rgy and waste consumption	
2. Plans		s and targets to improve environmental sustainability	
2.1.	Prod	duction of Greenhouse Gas Emissions	8
2.1	.1.	Scope 1	9
2.1	.2.	Scope 2	10
2.1	.3.	Scope 3	12
2.2.	Wat	er consumption	12
Afterwo	rd		14
Annex I.	Sumn	nary of environmental targets	15



FOREWORD – Lutz Rathmann / CEO, Managed Technology Division / Riedel Communications

I am delighted to present our first-ever Environmental Report as the CEO of Riedel's Managed Technology Division. This marks an exciting milestone for us as we embark on our journey towards becoming a more sustainable and environmentally friendly organisation.

Over the past year, we have taken significant strides in understanding and addressing our environmental impact. While we recognise that we are at the beginning of this transformative process, we are committed to making a positive difference.

Sustainability has become a central pillar of our corporate values. Our dedication to creating a greener future has led us to implement various initiatives aimed at measuring and reducing our carbon footprint. Through many different activities, we have already and will further make noticeable progress in measuring and minimising our environmental impact.

However, we understand that this is just the beginning. Our ultimate goal is to achieve a recognised sustainability certification in order to validate our efforts and demonstrate our commitment to meeting stringent environmental standards.

As we strive towards this certification, we remain dedicated to engaging all stakeholders in our sustainability journey. We value the input and collaboration of our employees, divisions, group members and suppliers. Together, we can foster a culture of environmental responsibility and innovation.

While we may be only one year into our sustainability endeavours, we are driven by a strong sense of purpose and optimism. We believe that every step, no matter how small, contributes to the greater mission of safeguarding our planet for future generations.

Transparency is fundamental to our progress, and we are committed to providing regular updates on our sustainability performance. This report marks the first of many, as we seek continuous improvement and learning throughout our sustainability endeavours.

In conclusion, I extend my gratitude to all stakeholders for your support as we embark on this transformative journey. Together, we can make a meaningful impact and forge a path towards a more sustainable future.

Thank you for being part of our commitment to sustainability.

Sincerely,

Lutz Rathmann CEO, Managed Technology Division



Introduction

Riedel Communications, founded in 1987, designs, manufactures and distributes innovative real-time networks for video, audio and communications. Its products are used for broadcast, pro-audio, event, sports, theatre and security applications worldwide. The company is known for pioneering digital audio matrix systems, as well as SDI and IP-based media networks. Riedel is headquartered in Wuppertal, Germany, and employs over 1000 people in 30 locations throughout Europe, Australia, Asia and the Americas.

Riedel operates in three business fields:

- Manufacturing: Riedel designs, manufactures and distributes pioneering real-time networks for video, audio and communications. Its products are used worldwide for broadcast, pro-audio, event, sports, theatre and security applications.
- Managed Technology: Managed technology is much more than technology rentals. With Riedel's equipment also comes the company's expertise. In addition to state-of-the-art audio, video, IT and communications technology, Riedel also offers comprehensive service and support, from project planning to on-site implementation.
- Riedel Networks: a global network services provider, focused on tailormade networks. It is listed in the 2021 Gartner Magic Quadrant for Network Services, Global, as a niche provider specialised in mid-sized internationals and the media and events sector.

We recognise that environmental protection is a common issue for society as a whole and are therefore committed to doing our part by promoting environmental sustainability and operating responsibly, in accordance with all environmental regulations, legislation and best practices.

We are committed to carrying out all business processes in line with our Environmental Policy and to purposefully move toward the goals stated in this Environmental Management System.



Environmental Management in RIEDEL Communications GmbH & Co KG

RIEDEL's sustainability programme (i.e., the Environmental Policy and EMS) is coordinated by our Environmental Management Expert who reports to the C-level management. The ambition of this programme is to implement ideas for sustainable living into our daily work life by kickstarting, executing and reviewing group-wide initiatives in this field and setting prominent examples intended to raise everyone's awareness of their contribution to sustainability. The Environmental Policy, as well as the goals that are set in the Environmental Management System are revisited and updated, as needed, every six months. The current Environmental Report focuses on Riedel GmbH & CO KG, whose main premises including the main production site and administrative headquarters are located in Wuppertal.

Given that the nature of our business does not entail critical risks for the environment itself (e.g., we do not create immediate noise/air emissions), our sustainability initiatives rather focus on the opportunity side of the equation. In other words, we evaluate our operational activities with the explicit goal of minimising our environmental impact and thereby maximise opportunities for carrying out our business activities sustainably.

When it comes to risks inherent to all supply chain activities, we comply with and monitor all critical risks as required by legislation and international quality standards.

Our Environmental Policy and our Environmental Goals are communicated to all managers and employees through an internal employee portal and RIEDEL employee guidelines.

1. Current Situation

Since the onset of the pandemic, 2022 is the first year in which work and processes in the events and entertainment sector have returned, more or less, to "normal". Not only have things gone back to normal, but the activity has been even greater than before, which has also meant more business for Riedel. That also means that the number of employees has increased in comparison with 2021. The growth of revenue and employee numbers, as well as the end of COVID-19 restrictions had an impact on the production of greenhouse gasses. Unfortunately, however, when you look at the total figures, this impact was not always positive.

While this is our first official publication of an Environmental Management Report, we have already made great strides in making our facilities, work and production processes more environmentally friendly.

1.1. Logistics, production and procurement management.

For several years now, our logistics department has improved its operations to make it more environmentally friendly. The foil that we use for wrapping our sales orders is 60% recycled and we use a wrapping machine for the process, which saves us 40% of wrapping material, as the foil is thinner and the machine increases the stretch factor against manual application to an optimum level. As a result, less foil is needed overall.



For shipment of our Riedel products, we use 100% recycled cardboard boxes, which are adapted to the dimensions of the goods to: (a) use as little filling as possible; and (b) reduce the amount of waste. The filling itself consists of 80% recycled materials.

Our delivery pallets are made from 100% recycled sawdust, and we use Euro-pallets which, in the case of deliveries to our internal sites, are always exchanged equally, thus reducing wood waste.

For rental jobs, we use and re-use plastic pallets until they deteriorate to the point they are no longer viable for the transportation of goods and are instead sent to recycling. We also pack most of the rental equipment in aluminium boxes as they provide the best possible protection for highly sensitive goods and are secured with tension belts during delivery, so they may be used almost indefinitely if they do not get damaged. In addition, the lightweight properties of the aluminium help reduce the carbon footprint during transportation.

The operations of most of our carriers are climate neutral or they have set the goal to have climate neutral operations in the near future.

When it comes to our production sector, when working on innovations/designing our products, we are already considering environmental issues. In general, we are moving towards more software-based products and downsizing our equipment. It therefore becomes smaller in size and weight, which has a positive impact on reducing our environmental footprint. Good examples include Riedel's MediorNet distributed AV network infrastructure, a family of technologies that combine signal transport, routing, processing and conversion in a redundant real-time network, and Riedel's SmartPanels, which combine control, intercom and other applications into one panel, naturally ensuring a more environmentally sustainable production cycle. The compact, modular and multifunctional design is created to make audiovideo processes more energy efficient, as well as reducing waste when a change of details is required¹.

1.2. Employee mobility

Riedel Communications has implemented several initiatives to encourage our employees to choose more environmentally friendly mobility solutions.

For more active and greener everyday mobility options, Riedel Communications offers a JobBike leasing programme, which allows employees to buy a bike and pay for it through leasing for additional benefits. In addition, Riedel covers employees' share of the fully comprehensive insurance which is included in the leasing package. And for days when the weather is not ideal for bike rides, or for those who prefer public transport over cycling, we also offer the discount for Wuppertal's monthly public transport abo-tickets.

Riedel's employee parking also offers designated parking spaces for electric cars with charging stations.

For those entitled to a company car, our company car policy includes the "CO₂ emissions rule", whereby the lower the CO₂ emissions of the car/engine you select, the higher your monthly budget

¹ https://www.sportsvideo.org/2022/10/28/svg-tech-insight-coming-to-environmental-sustainability-naturally-via-a-modular-software-defined-approach/



All Riedel offices (both HQ and international offices) are fitted with professional teleconferencing equipment targeted at maximising the number of virtual meetings and reducing business trips to the reasonable minimum. Employees at all levels are provided with video telephony software (Microsoft Teams) and are encouraged to use this as the primary communication channel within the company.

1.3. Energy and waste consumption

1.3.1. <u>Energy</u>

To reduce power consumption, practically all buildings at Riedel's headquarters use LED lighting. Several areas are equipped with automatic light switches, which are motion-activated and switch off if no motion is detected for a period of time. Lights are also switched off automatically in the evening in some departments.

In 2022, Riedel's headquarters extended its photovoltaic system to 500 kWh. All energy produced is fully consumed by the RIEDEL Technology Park.

1.3.2. Waste

At Riedel, we practise the "3Rs rule" – reduce, reuse, recycle – to minimise the amount of waste produced. In 2022, waste was separated into paper and residual waste, and metal and electronic waste was collected separately.



2. Plans, goals and targets to improve environmental sustainability

Given that the nature of our business does not entail critical risks for the environment itself (e.g., we do not create immediate noise/air emissions), our sustainability initiatives rather focus on the opportunity side of the equation. In other words, we evaluate our operational activities with the explicit goal of minimising our environmental impact and thereby maximise opportunities for carrying out our business activities sustainably.

When it comes to risks inherent to all supply chain activities, we comply with and monitor all critical risks as required by legislation and international quality standards.

Our sustainability programme is built on two ambitions:

- Committing ourselves to sustainable living and working.
- Inspiring others to practise sustainable living and working.

Therefore, many of our activities in this field explicitly focus on setting prominent examples for sustainable life and work styles to encourage critical thinking in this regard.

2.1. Production of Greenhouse Gas Emissions

Greenhouse gas emissions are divided into three 'scopes'. Scope 1 emissions are direct emissions from our owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 emissions are all indirect emissions that are not included in Scope 2 and that occur in the value chain of the reporting company, including both upstream and downstream emissions.²

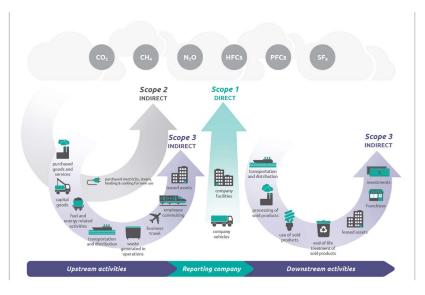


Figure 1. Scopes and emissions across the value chain (Source: GHG Protocol³)

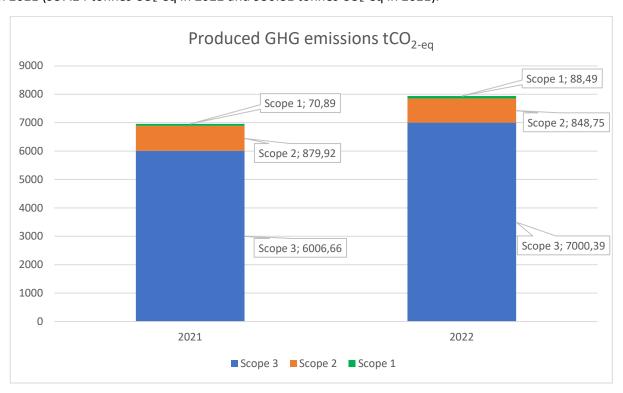
2

² https://ghgprotocol.org/sites/default/files/standards_supporting/FAQ.pdf

https://ghgprotocol.org/sites/default/files/ghgp/standards_supporting/Diagram%20of%20scopes%20and%20emissi_ons%20across%20the%20value%20chain.pdf



The total greenhouse gas (GHG) emissions produced by Riedel Communications in 2022 were 7,939.63 tonnes CO_2 -eq, which is 14.12% higher than in 2021 (6,957.47 tonnes CO_2 -eq). The main factor impacting the increase of GHG emissions was the growth of our sales. If we exclude Scope 3, where more than 87% of GHG are produced by sold products, Scope 1 and Scope 2 produced GHG emissions are 1.43% lower than in 2021 (937.24 tonnes CO_2 -eq in 2022 and 950.81 tonnes CO_2 -eq in 2021).



However, this is not to say that we do not need to be mindful of these figures. Riedel must make more efforts to reach our target of reducing our GHG emissions by 50% by 2030 (in comparison with base year 2021) and focus our efforts on achieving the EU's common target of reaching net-zero greenhouse gas emissions by 2050, which is also our target for that year.

2.1.1. Scope 1

Scope 1 GHG emissions at Riedel Communications are generated by our carpark, where at year-end 2022 we had 46 cars (47 at year-end 2021), of which 23% are electric or plug-in hybrids. In total, Scope 1 emissions produced in 2022 reached 88.49^4 tonnes CO_2 -eq, and that is almost 25% more compared to 2021 (70.89 tonnes CO_2 -eq).

The main explanation for this increase is the end of pandemic restrictions and the rise in the number of events in 2022.

Our targets for reducing Scope 1 GHG emissions:

⁴ For Scope 1 GHG emission calculations, emission factors published by the IPCC Emission Factor Database (https://www.ipcc-nggip.iges.or.jp/EFDB/main.php) were used.



- 1. Reduce Scope 1 GHG emissions by 75% by 2030 in comparison with the base year (2021).
- 2. Move towards making carpark consist of a minimum of 75% of cars fuelled by renewable energy by 2030.

2.1.2. Scope 2

Our Scope 2 GHG emissions are produced by electric energy consumed at our premises, as well as oil that is consumed in heating periods. While in 2022, we have expanded our photovoltaic energy production, most electric energy is still purchased from local providers.

The total produced GHG emissions that fall under Scope 2 in 2022 were 848.75 tonnes CO₂-eq, which is 3.54% less than in 2021 (879.92 tonnes CO₂-eq).



Our target is to reduce Scope 2 emissions by 50% by 2030 in comparison with the base year (2021).

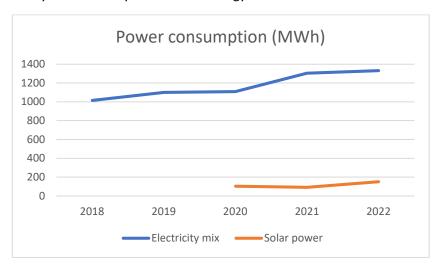
2.1.2.1. Power Consumption

In recent years, the power consumption at Riedel's Headquarters overall has been Rising slightly, in turn having an impact on our GHG emissions. However, the main reason for this is the growth of the business. For instance, since 2018 we can point to the opening of a new warehouse that we use more intensively, the increase in the number of employees and the plant's increased revenue.



In 2022, total by power usage produced GHG emissions are 569.85 tonnes CO2-eq, which is 2.17% more than in 2021 (557.7 tonnes CO₂-eq)⁶. The main reasons for this are the growth of operations handled in the new warehouse, as well as the increase in the number of offices and the further addition of e-charging stations.

Riedel Communications has a photovoltaic system in place, which was expanded in 2022 to 500 kWh. The amount of energy produced was 104,000 kWh in 2020, 92,452 kWh in 2021 and 152,739 kWh in 2022. All energy produced is fully consumed by RIEDEL Technology Park.



In part, the possibilities of reducing produced GHGs relies on our local power provider, which has a target to switch to power fully produced from renewable energy sources by 2035.

2.1.2.2. Heating and oil consumption

The buildings at Riedel's HQ are heated with oil, and oil consumption every year has been at similar levels. Oil / heating consumption is also related to average exterior temperatures and the m2 heated at the site.

Total produced GHG emissions in 2022 were 278.95⁷ tonnes CO₂-eq which is 13.43% less than in 2021 $(322.22 \text{ tonnes } CO_2\text{-eq}).$

One of the factors that helped to reduce the heating consumption is the decision to reduce the average heating temperature at the site by 1-2 degrees Celsius.

⁵ For calculations of GHG emissions produced by power consumption, emission factors published by Umwelt Bundesamt (https://www.umweltbundesamt.de/sites/default/files/medien/1410/publikationen/2022-04-13 cc 15-2022 strommix 2022 fin bf.pdf) were used.

⁶ Location-based greenhouse gas emissions.

⁷ For calculations of GHG emissions produced by heating, emission factors published by Umwelt Bundesamt (https://www.umweltbundesamt.de/sites/default/files/medien/479/publikationen/cc 29-2022 emission-factorsfossil-fuels.pdf) were used.



2.1.3. Scope 3

Scope 3 includes a wide variety of GHG emission producing factors; therefore, in our case, as a manufacturing and service company, the majority of produced GHG emissions fall under this scope.

Total produced GHG emissions in 2022 in Scope 3 were 7,000.39 tonnes CO_2 -eq, which is 16.54% more than in 2021 (6,606.66 tonnes CO_2 -eq).

When divided by categories, the produced greenhouse gas emissions are as follows:

Category	2022 emissions (tonnes CO ₂ -eq)	2021 emissions (tonnes CO ₂ -eq)	Change
Waste Generated in Operations ⁸	2.72	2.47	+0.25%
Business Travel	868.49 ⁹	1295.85	-32.98%
Use of Sold Products ¹⁰	6129.18	4708.34	+30.18%

Since the onset of the pandemic, 2022 was the first year in which the world returned to "normal", and that was apparent also in our company. For instance, we saw an increase in the number of events and orders, which in turn impacted our Scope 3 emissions, especially in the categories related to sold products. While the Use of Sold Products category shows high GHG emissions, it must be remembered that produced emissions are calculated over the lifetime of a device (3 years) and it is an approximate number, since the produced GHG emissions are highly dependent on the type of power used (i.e., renewable energy, fossil fuels or mixed energies), as well as the energy factor in the country where the device is actually used.

Although the number of orders and employee count rose last year, the waste emission amount has risen relatively little. However, in the future, we must think about reducing this figure despite the greater numbers of employees and orders.

Riedel Communications' aim for 2025 is to reduce unrecycled waste by 50%. Currently, we separate waste into three factions: paper, metal/electronics, and other. Batteries are also handled separately from all other waste. Furthermore, Riedel implements a "reduce, reuse, recycle" policy to minimise the amount of waste. One of the main actions for reducing the amount of unrecycled waste is to implement separate plastic waste collection in 2023.

2.2. Water consumption

Water consumption at the headquarters has remained at similar levels every year. However, we can see the decline in water usage in the last three years. While in 2020 water consumption was 5,799 CBM, in

⁸ Emission factors for calculation process are taken from DEFRA

⁽https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting).

⁹ Emissions provided by supplier.

¹⁰ As emission factor for this position has been taken CO2-eq emission factor in European Union (https://www.eea.europa.eu/data-and-maps/daviz/co2-emission-intensity-12/#tab-googlechartid_chart_11), therefore there might be deviations of amount, depending on consumers country and type of power used by consumer.



2021 and 2022 it was 3,982 CBM and 3,983 CBM respectively. Water at the headquarters is mainly used for employees' daily needs (drinking water and bathroom facilities). As a result, there is little margin for water consumption reduction.

Our target is to keep the water usage at current levels (3,500 - 4,500 CBM) even with further growth in the business.



Afterword

Although this is our first official report on environmental sustainability, it is great to see that we have already been working in many areas with environmental and climate aspects in mind. That said, we understand the need and are committed to doing more to focus our efforts on achieving international climate and environmental targets. This also includes working on more detailed and thorough data **analyses** for reporting and collaborating with our suppliers and other stakeholders to find the best solutions for reaching our targets, especially when it comes to reducing Scope 3 emissions.

We believe that we can reach our set goals and are committed to providing regular reports in this area to all interested parties, with the hope of also motivating them to strive for the target of Net Zero Emissions by 2050.



Annex I. Summary of environmental targets

GHG Emission reduction targets

Target	Base Year	Year
Net Zero GHG emissions across the value chain	2021	2050
Reduce our GHG emissions by 50%	2021	2030
Reduce Scope 1 GHG emissions by 75%	2021	2035
Move towards making carpark consist of a minimum of 75% of cars fuelled by renewable energy	N/A	2030
Reduce Scope 2 emissions by 50%	2021	2030

Environmental targets

Code	Target	Year
E_1	Reduce unrecycled waste by 50% in comparison with base year (2021)	2025
E_5	Keep the water usage at current levels (3,500 – 4,500 CBM).	Yearly