

Facts & Figures

VTU 2023

Revision	Date	Author
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TABLE OF CONTENT

1	About this document.....	4
2	Company information	4
2.1	Ownership and company structure	4
2.2	Economic performance	5
2.3	Financial assistance received from government.....	6
3	Organization	6
3.1	Corporate Management	6
3.2	Strategy, policies and vision.....	7
3.3	CSR Management.....	7
3.4	Stakeholder Management	8
4	Employment.....	9
4.1	Number of employees and executives	9
4.2	Type of employment.....	11
4.2.1	Contract type	11
4.2.2	Alternative work arrangements.....	11
4.2.3	Temporary workforce	11
4.3	Turnover rate.....	11
4.4	Parental leave	11
4.4.1	Return Rate	12
4.4.2	Retention rate	12
4.5	Training.....	12
4.5.1	Training hours	12
4.5.2	ESG relevant trainings	13
5	Remuneration	13
5.1	Gender pay gap.....	13
5.1.1	Average unadjusted gender pay gap	14
5.1.2	Average adjusted gender pay gap	14
5.2	Highest paid individual	15
5.3	Benefit plan obligations and other retirement plans	15
6	Energy KPIs.....	15
7	Occupational health and safety.....	16
7.1	Occupational safety.....	16
7.2	Occupational health.....	16
7.3	Worker participation, consultation, and communication on occupational health and safety.....	17

8	Compliance.....	17
8.1	Mechanisms for seeking advice and raising concerns.....	17
8.2	Discrimination.....	18
8.3	Corruption.....	18
9	IT Security and data privacy.....	18
10	Supply chain management.....	18
11	Corporate Carbon Footprint.....	19
11.1	Emission calculation methodology.....	20
11.2	Calculation data.....	20
11.2.1	Scope 1.....	20
11.2.2	Scope 2.....	21
11.2.3	Scope 3.....	21
12	GRI Index Table.....	25

1 About this document

The Facts & Figures Sheet VTU 2023 details the numbers and information underlying the sustainability report for 2023.

It is therefore part of VTUs sustainability reporting.

The sustainability reporting (Sustainability Report and Facts & Figures Sheet) include all the entities belonging to the VTU GROUP. These entities are also included in the financial report of VTU. Both financial and sustainability reporting is carried out by a central office and therefore the same figures are collected using the same methodology (the parent company owns 100% of shares in all subsidiaries).

2 Company information

VTU offers a wide range of engineering services for the process industry.

This includes: design and planning of process plants and entire production facilities; plant optimization; general planning of large-scale investments; industrial digitalization; project management & project controlling in all project phases; EPCMv services; consulting for e.g. safety studies.

For the pharmaceutical industry VTU offers highly specialized qualification and validation services according to cGMP, development, transfer and regulatory submission of production processes as well as inspections and audits.

2.1 Ownership and company structure

Ownership of VTU GROUP changed in 2023. Deutsche Private Equity, the major shareholder of VTU GROUP sold its shares (70 %) to the private equity firm Altor.

With this change the parent company of VTU and the structure underneath changed slightly. Former parent company VTU Top GmbH was merged with VTU Services AT GmbH and moved as 100% subsidiary under the new parent company VTU Management GmbH.

There were no acquisitions or disposals of subsidiaries of VTU in the reporting period.

VTU GROUP consists of several subsidiaries and operates 34 branches in 7 countries.

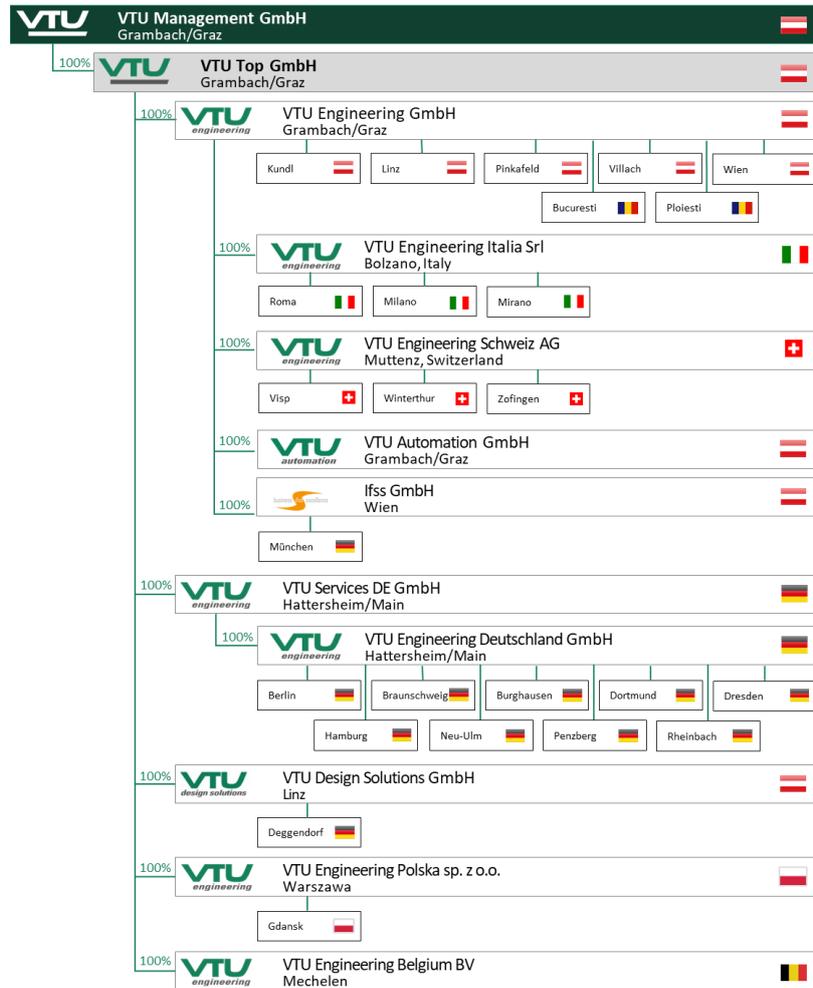


Figure 1: Structure of VTU and branch locations

Branch location changes in 2023

New: 04/2023 Berlin (Germany)

Move: 11/2023 Latina to Roma (Italy)

2.2 Economic performance

Table 1: Financial KPIs

KPIs	
Net revenue	179.1 mEUR
Equity capital (incl. investment subsidies)	180.1 mEUR
External capital	136.8 mEUR
Total capital	316.8 mEUR

2.3 Financial assistance received from government

VTU GROUP received the following financial assistance from government:

- Investment subsidies: €33,700
- Salary and wage cost subsidies: €19,600
- Other benefits/subsidies: €26,900

€65.600 in research and education bonus were paid back to government as a correction of research projects that were not recognised as eligible for funding.

3 Organization

3.1 Corporate Management

VTU GROUP was headed in 2023 by three managing directors – Dr Friedrich Fröschl, CEO, Alexander Asbäck, COO, Matthias Steinbrink, CFO – to whom the managing directors of the individual subsidiaries reported, as can be seen in Figure 2.

At the executive board level, CEO Friedrich Fröschl is responsible for economic, ecological and social issues as well as for reviewing and approving the information published in this regard. As chief executive officer and thus highest executive and at the same time highest internal control body, he reports to an independent advisory/supervisory board. This control reduces conflicts of interest.

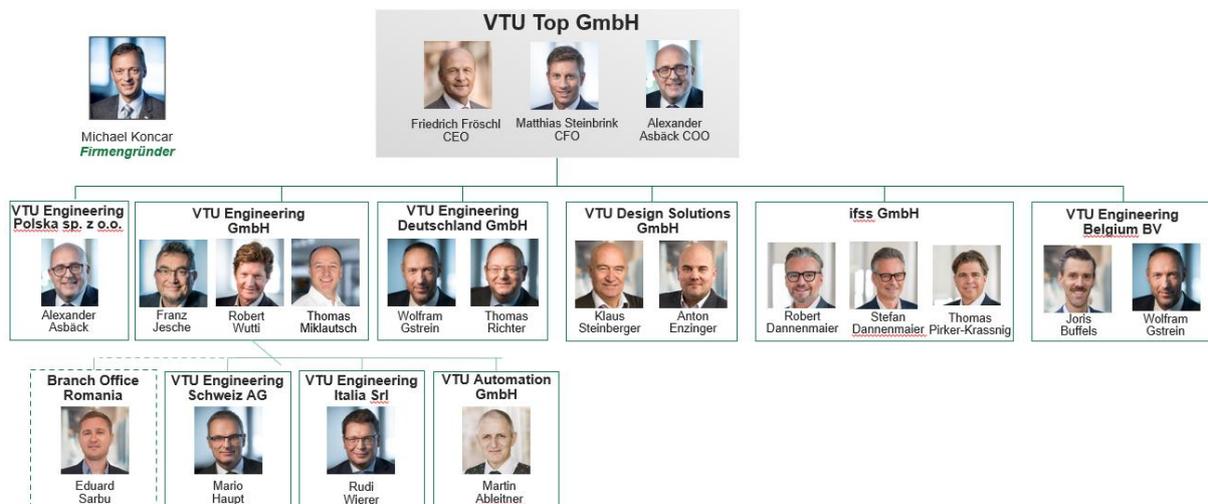


Figure 2: VTU Management organization

There are two committees for the VTU, which fulfil the monitoring and regulatory functions. On the one hand, this is the advisory/supervisory board, which consists of two industrial advisors who can contribute experience both from the management of large engineering groups and from manufacturing companies, as well as two representatives of the majority shareholder (Altor). This mix of experience from a wide variety of areas enables us to provide the best possible support for the further development of the VTU GROUP.

In addition, there is the shareholder committee, which consists of three members of the respective investment companies in VTU GROUP.

The advisory/supervisory Board is VTU's highest controlling body. It ensures that the regulatory requirements are implemented by the management, that the strategic direction of the company is aligned with the owner's ideas, that the company is managed sustainably in accordance with the requirements and

that the defined targets are realized. The control function is performed on a quarterly basis, during which the management reports to the advisory/supervisory board.

The nomination and appointment of the management and the advisory/supervisory board is carried out by the owner company. Professional and social qualification criteria are taken into account and diversity is becoming increasingly important (female member of the advisory/supervisory board from 2023).

3.2 Strategy, policies and vision

The management board is responsible for the development, approval and adjustment of company strategy, policies and visions in scope of the values and targets of VTU GROUP.

To support the management board in this tasks there exists a strategy team, which consists of all the managing directors of VTU and its subsidiaries.

To set a strong basis also employees are involved in such development. For example the Mission Statement, which reflects VTU's mindset and self-image, was developed together with young employees of VTU.

Once a year, goals and general status are examined as part of the management review, and additional or corrective measures are taken as required. Risks and possible consequences of inaction are assessed for all decisions, thus taking account of the precautionary approach to social and environmental issues. Project risk management and incident management also comprise incidents resulting in personal injury or environmental or property damage. Both processes are part of an integrated continuous process management for improvement through root cause analysis and group-wide learning from incidents.

3.3 CSR Management

CSR is the responsibility of the VTU GROUP's management. The strategy team discusses and decides on issues and goals relating to sustainability. The Director EHS & Sustainability (Environment, Health and Safety) is responsible for implementing and developing the decisions throughout the organization. Together with the sustainability manager assigned to him and the senior managers at country level, he drives strategic contributions to sustainable development. The implementation of tasks and projects decided in the strategy team can thus be delegated to the country and branch level.

Bi-weekly meetings are held between the CEO and the Director EHS & Sustainability to discuss current sustainability issues.

Material issues in the context of sustainability and EHS are regularly reported by the Director EHS & Sustainability in the strategy team and discussed with the managing directors. CSR and the derived key figures are also part of the annual management review.

3.4 Stakeholder Management

On a yearly basis a review of VTU’s stakeholder landscape is done by the management and stakeholder interests as well as risks and chances linked to these stakeholders are discussed.

The most important stakeholder identified for VTU are (in alphabetic order):

- Customers
- Employees
- Intra-group service providers
- Management/Executives
- Shareholders
- Subsidiaries
- Supervisory/Advisory board
- Suppliers

The aim of involving these stakeholders in communication is to ensure that their interests and needs in their relationship with VTU are known and can be accounted for in VTU’s strategies, target and action setting.

As the communication is done by a large number of different functions within VTU a survey was conducted in march 2023 using the tool SurveyMonkey to understand the methods of communication as well as the communication networks within VTU. The results can be seen in Figure 3.

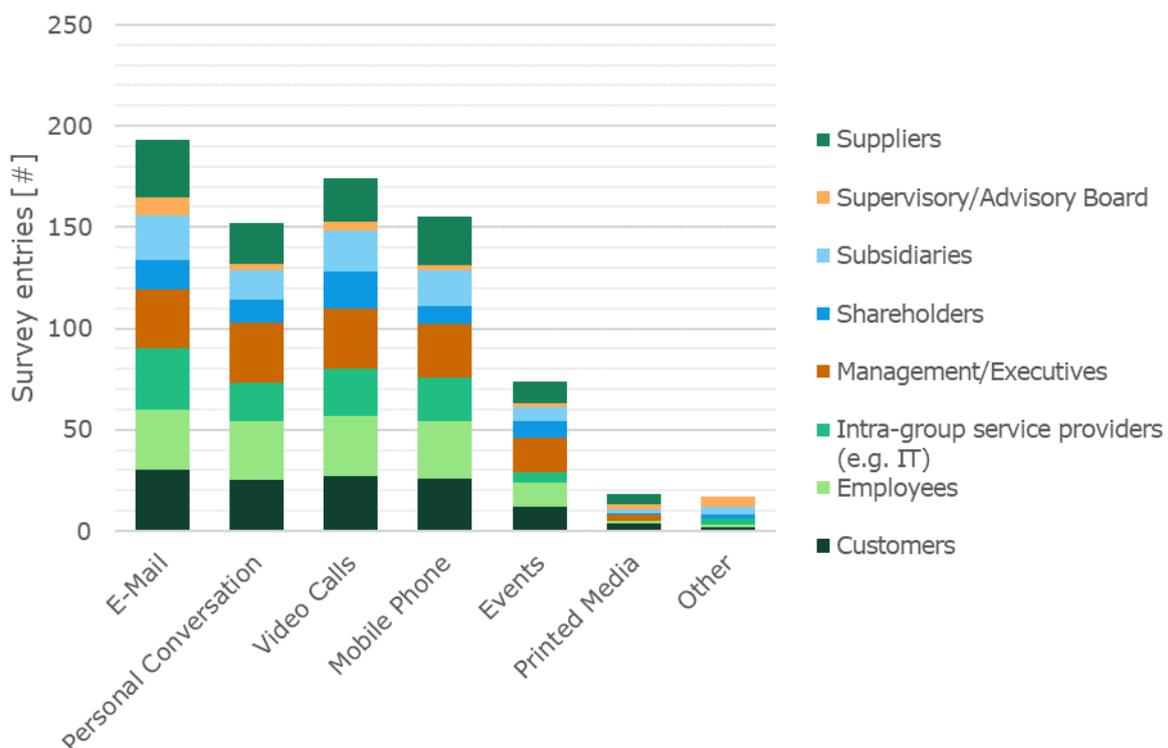


Figure 3: Stakeholder communication channels

The means “Chat/LinkedIn”, “social media” and “websites” were mentioned and summarized as “Other”.

This enables management to utilize the different communication channels to receive specific feedback or send out information to a specific stakeholder group.

4 Employment

VTU runs a business without impact by seasons, therefore there are no significant fluctuations in the number of employees over a reporting year. Employee numbers have been growing over the last years and continued to do so in 2023.

Key date for headcount in the following chapters and tables is December 31st of the respective year. In 2023 in total 278 new employees joined VTU.

4.1 Number of employees and executives

Executives include all line management positions in the organization. Executives are defined as employees who manage other employees from a disciplinary point of view.

In terms of top-level management (first two executive levels) 100% derive from VTU countries (DE, AT, IT, BE), in terms of all management levels around 97% derive from the countries of the VTU branches.

Table 2: Employee numbers VTU GROUP total according gender

Year	Employees						Executives					
	Total	f		m		d	Total	f		m		d
2021	985	341	35 %	644	65 %	- -	149	31	21 %	118	79 %	- -
2022	1,172	439	37 %	732	62 %	1 1 %	188	45	24 %	143	76 %	0 0 %
2023	1,293	484	37 %	808	62 %	1 1 %	201	51	25 %	150	75 %	0 0 %

Table 3: Employee numbers VTU GROUP total according age range

Year	Employees						
	Total	< 30		30 – 50		> 50	
2023	1,293	269	21 %	809	62 %	215	17 %

Table 4: Employee numbers in Austria¹

Year	Employees				Executives			
	Total	f	m	d	Total	f	m	d
2021	530	190	340	-	85	19	66	-
2022	611	236	374	1	105	30	75	0
2023	671	253	417	1	111	31	80	0

Table 5: Employee numbers in Germany²

Year	Employees			Executives		
	Total	f	m	Total	f	m
2021	258	83	175	38	7	31
2022	310	105	205	54	8	46
2023	350	120	230	58	9	49

¹ includes VTU Engineering GmbH, VTU Management GmbH, VTU Top GmbH (former VTU Group GmbH and VTU Services AT GmbH), VTU Design Solutions GmbH, VTU Automation GmbH and iffs GmbH

² Includes VTU Engineering Deutschland GmbH and VTU Services DE GmbH

Table 6: Employee numbers in Switzerland

Year	Employees			Executives		
	Total	f	m	Total	f	m
2021	78	24	54	12	1	11
2022	97	34	63	13	0	13
2023	112	44	68	15	1	14

Table 7: Employee numbers in Italy

Year	Employees			Executives		
	Total	f	m	Total	f	m
2021	78	27	51	9	3	6
2022	95	35	60	18	6	12
2023	92	34	58	20	8	12

Table 8: Employee numbers in Romania

Year	Employees			Executives		
	Total	f	m	Total	f	m
2021	25	15	10	3	1	2
2022	38	21	17	6	1	5
2023	44	27	17	6	2	4

Table 9: Employee numbers in Poland

Year	Employees			Executives		
	Total	f	m	Total	f	m
2021	16	2	14	2	0	2
2022	13	5	8	2	0	2
2023	13	4	9	2	0	2

Table 10: Employee numbers in Belgium

Year	Employees			Executives		
	Total	f	m	Total	f	m
2021	-	-	-	-	-	-
2022	8	3	5	0	0	0
2023	11	2	9	0	0	0

4.2 Type of employment

4.2.1 Contract type

There were eight employees (two male, six female) with a fixed-term contract, all other employees had an open-ended contract.

4.2.2 Alternative work arrangements³

VTU offers different work models for working part time.

Table 11: Number of employees working part time

Year	In part-time					
	Total		f		m	
2021	175	17,8 %	106	31,1 %	69	10,7 %
2022	266	22,7 %	162	36,9 %	104	14,2 %
2023	382	29,5 %	242	50,0 %	140	17,3 %

The number of employees by gender that were entitled to parental leave, has not been recorded by VTU so far as the administration of this data has no effect on the entitlement to parental leave for the employees.

4.2.3 Temporary workforce

Depending on the scope and content of the project, external staff is employed as subcontractors to carry out activities for VTU. This concept is applied for special topics such as the design of HVAC, safety supervision on construction sites etc.

VTU employed seven temporary workers in 2023 (key date: 31.12.2023).

4.3 Turnover rate

Table 12: Number of employees resigned from VTU and corresponding turnover rate

Year	Resignations (heads) / Turnover rate (related to FTE)					
	Total		f		m	
2021	105	11.8 %	30	10.0 %	75	12.7 %
2022	160	14.5 %	51	12.9 %	109	15.4 %
2023	157	12.5 %	61	13.0 %	96	12.2 %

4.4 Parental leave

Table 13: Number and percentage of employees on maternity/paternity leave

Year	On maternity/paternity leave					
	Total		f		m	
2021	63	6,4 %	39	11,4 %	24	3,7 %
2022	83	7,1 %	50	11,4 %	33	4,5 %
2023	97	7,5 %	61	12,6 %	36	4,5 %

³ The figures in this table do not include ifss in 2021, as ifss did not belong to VTU GROUP for the entire year in 2021.

4.4.1 Return Rate

In total 45 employees (f: 18, m: 27) returned 2023 to VTU after their parental leave ended.

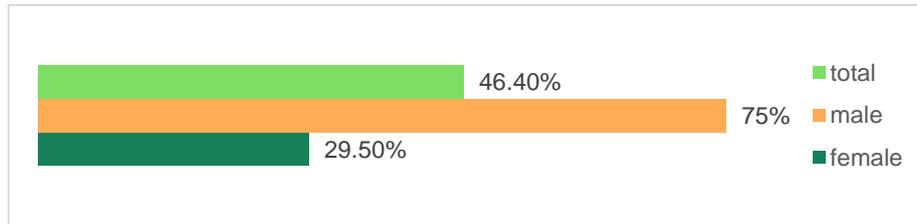


Figure 4: Return rate

4.4.2 Retention rate

In total 47 employees (f: 25, m: 22) remained with VTU 12 months after their parental leave ended in 2022.

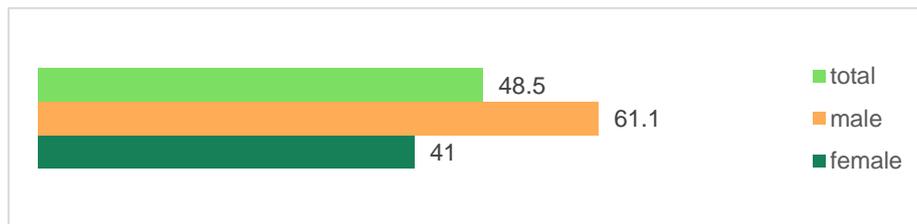


Figure 5: Retention rate

4.5 Training

In 2023, a total of 28 people successfully completed the 4 modules of the compulsory leadership training. An additional 34 people started the training in 2023 and are expected to complete it in 2024.

4.5.1 Training hours

Table 14 shows the amount of training hours per FTE as well as the distribution between male and female employees.

Table 14: Training hours per average FTE in 2023

Country	Training hours per average FTE		
	total	female	male
Austria	68.10	66,40	69,22
Germany	94.42	77,04	102,35
Italy	26.05	25,98	26,09
Switzerland	90.64	89,54	91,20
Romania	347.53	371,63	314,02
Poland	117.82	102,90	126,20
Belgium	87.54	21,25	107,52
Total average	84.63	85,84	84,08

4.5.2 ESG relevant trainings

Trainings are tracked and documented by the software solution VTU Academy. The numbers presented here are taken out of this software.

Training Compliance and Code of Conduct

Participants: 952
Rate of total employees: 73,63 %

Training CSR Policy

Participants: 985
Rate of total employees: 76,18 %

Training IT Security

Participants: 744
Rate of total employees: 59,9 %

VTU Guideline

Participants: 661
Rate of total employees: 51,12 %

5 Remuneration

Remuneration policies exist for each country/subsidiary in VTU and are aligned with respective collective labor/bargaining agreements.

100% of employees are thereby covered by formal agreements concerning working conditions

Bonuses of employees are depending on the economic success of the company. Managers' bonuses are subject to the achievement of yearly agreed individual and corporate goals.

Remuneration KPIs can be found in Table 15, the following chapters give additional information.

Table 15: Remuneration KPIs

KPI	
Unadjusted pay gap	23 %
Adjusted pay gap	4 %
Ratio of highest paid individual to media of all employees	3,66

5.1 Gender pay gap

To calculate the pay gap numbers the gross annual salary was used.

The annual salaries used do not include bonuses or other additional payments.

For employees working part-time, the salary was extrapolated to full-time. Salaries from Switzerland, Poland and Romania were converted into euros.

For employees working on All-In contracts the overpayment was extrapolated to a regular salary.

5.1.1 Average unadjusted gender pay gap

The median of gross annual salaries was used to calculate the unadjusted gender pay gap. The gender pay gap was calculated as

$$\frac{\text{median salaries men} - \text{median salaries women}}{\text{median salaries men}}$$

5.1.2 Average adjusted gender pay gap

The unadjusted gender pay gap leads to a distorted and thus not meaningful result due to the different job profiles and associated salary groups. It is therefore necessary to compare salaries of similar job profiles and thus similar salary groups.

For this reason, all engineer and senior engineer positions (e.g. Process Engineer, Mechanical and Piping Engineer, Qualification Engineer ...) were combined for consideration. This group comprises approx. 60 % of the entire workforce in 2023.

The median of gross annual salaries was used to calculate the adjusted gender pay gap. The gender pay gap was calculated as

$$\frac{\text{median salaries male engineers} - \text{median salaries female engineers}}{\text{median salaries male engineers}}$$

Furthermore, the pay gap needs also to be looked into regarding the years of experience. Therefore the data pool was also broken down into experience groups. This leads for the group of engineers to the distribution shown in Table 16.

Table 16: Gender pay gap engineers by experience years

Experience years	Headcount female	Headcount male	Pay gap
Entire group	266	497	4 %
> 30	2	8	25 %
25 - 30	2	15	0 %
20 - 25	10	21	-3 %
15 - 20	20	50	6 %
10 - 15	43	73	1 %
5 - 10	74	143	-1 %
≤ 5	115	187	0 %

It can be seen that there is a very small or even negative gender pay gap in the table for most experience year groups.

In the group of employees with more than 30 years of professional experience, a very high gender pay gap can be seen. However, the number of female employees is very low here, which means that a small number of higher salaries among the male employees already have a great influence.

This result, which includes the entire VTU GROUP including its subsidiaries, is also reflected in the results of the individual subsidiaries.

No meaningful evaluation could be made for the remaining positions in VTU, because either the number of people with comparable job profiles was too small to form representative group sizes taking into account the years of experience, or the groups of people are extremely one-sided, i.e. a predominantly purely male or purely female workforce.

5.2 Highest paid individual

To calculate the ratio of the annual total compensation for the highest paid individual to the median of the annual compensation of the whole workforce the gross annual salary was used. The annual salaries used do not include bonuses or other additional payments.

The ratio was calculated as

$$\frac{\text{median salary all employees}}{\text{highest salary}}$$

5.3 Benefit plan obligations and other retirement plans

Obligations for pension payments are 100% externally funded. The normal statutory tables and specifications are used to calculate the reserves.

Pension payments are projected once per year.

The percentage of annual salary contributed by employee or employer is more than 95%.

6 Energy KPIs

Table 17: Energy KPIs

	Unit	2021	2022	2023
Total energy consumption	GJ	7,789.60	8,765.61	9,016.76
Energy intensity (per FTE)	kWh/FTE	2,321.15	2,202.13	2,093.32
Energy intensity (per mEUR turnover)	kWh/mEUR	16,462.47	14,066.39	13,984.67
GHG emissions intensity (per mEUR turnover) ⁴	t CO ₂ e/mEUR	25.71	27.73	36.44

⁴ Scope 3 input was extended in 2022 and 2023, leading to an increased corporate carbon footprint

7 Occupational health and safety

Occupational health and safety is a top priority at VTU. The topic is steered by the Director EHS & Sustainability and driven by the responsible persons EHS of the different subsidiaries.

Any hazards resulting from our activities are analyzed in a structured way and appropriate measures from this evaluation are defined, for which mandatory trainings are provided. VTU also organizes information events and seminars on relevant health and safety topics.

Alle employees of VTU GROUP are covered by this occupational health and safety system.

Employees can provide feedback and suggestions for improvement at any time. Appropriate measures are derived from these inputs, as well as from the results of incident investigations and inspections of offices and construction sites.

Their effectiveness is monitored on the basis of key figures, and the achievement of objectives is reviewed and evaluated together with the management team. In order to ensure effective implementation and maintain a continuous dialogue, regular discussions are held with employees or their representatives. The information obtained during these discussions is also incorporated into the planning of the measures.

For all German branches as well as the branches of Vienna and Grambach a health and safety committee exists. This covers 63,5 % of all VTU personnel (821 of 1293 employees).

7.1 Occupational safety

VTU investigates all reported incidents and takes measures to improve safety.

Table 18: Incident statistics

Year	Employees ⁵	Working hours	Incidents without lost time ⁶	Lost Time Incidents Injuries / Fatalities	Lost Days	LTIR
2021	985	1,532,550	18	0 / 0	0	0.00
2022	1,172	1,815,572	16	0 / 0	0	0.00
2023	1,293	2,000,576	30	3 / 0	13	1.50

The Lost time incident rate (LTIR) is calculated as follows:

$$LTIR = \frac{\text{Number of lost time incidents (injuries and fatalities)}}{1 \text{ million working hours}}$$

7.2 Occupational health

Table 19: Health statistics

Year	Employees ⁷	Working hours	Work related illness ⁸
2021	985	1,532,550	0
2022	1,172	1,815,572	0
2023	1,293	2,000,576	0

⁵ Key date 31.12. of the respective year

⁶ Includes near misses, first aid cases, external medical checks and restricted work cases

⁷ Key date 31.12. of the respective year

⁸ Includes near misses, first aid cases, external medical checks and restricted work cases

The Safety and Occupational Health Representatives required by law in the different countries VTU is operating (e.g. occupational physician, company doctor) are assigned externally and their services are available to employees free of charge if required.

To promote worker health various site-/country-specific measures are implemented, e.g. fruit provided, option of psychological counselling, height-adjustable desks and tables, free vaccination.

In several countries, employees are offered the opportunity to lease a bicycle at a reduced price in cooperation with corresponding service companies.

VTU supports participating in various sporting events by covering the entry fees of employees.

7.3 Worker participation, consultation, and communication on occupational health and safety

The consultation, participation and communication of employees on occupational health and safety is mainly carried out through jour fixes at different levels (from country to department level), specific occupational health and safety meetings, regular inspections of offices and sites as well as reports via the internal webpages.

Improvement suggestions can be done via a specific email address (vtu@vtu.com). All suggestions are evaluated and feedback is given to the employee.

8 Compliance

Reporting of compliance incidents can be done via the compliance line or directly to the relevant authorities within VTU (e.g. human resources).

Compliance KPIs can be found in Table 20, the following chapters give additional information.

Table 20: Compliance KPIs

Compliance incident type	Incident numbers in 2023
Critical matters reported to highest governance body	0
Discrimination	1
Corruption	0
Environmental laws and regulations	0
Health and safety impacts of products and services	0
Social and economic laws and regulations	0
Anti-competitive behavior, anti-trust, and monopoly practices	0

8.1 Mechanisms for seeking advice and raising concerns

VTU fosters an open discussion and punishment free communication. Employees can always contact and openly discuss with their management or human resources when seeking advice, raising concerns or giving feedback. There is also a specific email address (vtu@vtu.com) for such purposes.

To report anonymously any issues or concerns regarding compliance, behaviour, conflicts of interest or other topics a whistleblowing system called “VTU Compliance Line” is installed in VTU.

The system is run by the external provider “LegalTegrity”. The process steps in case of a report are as follows:

1. the report is made via the LegalTegrity portal
2. the report is reviewed by an independent lawyer
3. feedback is given to the reporter (still anonymous)
4. in the event of a substantial report, it will be forwarded to the company (Head HR Group/Head Legal)
5. investigation into the allegations
6. “Critical matters” are reported to the Advisory/Supervisory Board if relevant.

All employees are trained regularly on the “VTU Compliance Line” and the process of reporting misconduct.

8.2 Discrimination

One incident occurred in 2023. It was reported directly to HR department.

An employee was making generally disrespectful comments about women while not targeting someone specifically on repeated occasions. Management has an intense discussion with the employee and made VTU’s standpoint on this topic clear. No further incidents were observed thereafter.

8.3 Corruption

No comprehensive risk assessment regarding corruption risks of certain countries/branch locations have been conducted in VTU, but an annual query is conducted as part of the financial audit by external body.

9 IT Security and data privacy

VTU has an own reporting system for suspected cyber-attacks and data breaches called SUSI („Send Us Security Issues“).

In 2023 1,663 e-mails were reported in this system by VTU employees. In 4 cases of reported incidents an urgent security info/warning was sent out to all users.

For data privacy issues a dedicated data security officer is installed in VTU.

In 2023 no complaints on data privacy have been reported from internal and external sources. No incidents occurred.

10 Supply chain management

All suppliers used in VTU projects are subject to an initial assessment when being chosen for the first time and repeated assessments for each new contract.

During initial assessment VTU is checking safety and since mid 2023 sustainability criteria before approving a supplier.

In 2023 47% of new suppliers were checked for safety and sustainability criteria.

11 Corporate Carbon Footprint

Table 21: Corporate Carbon Footprint of VTU GROUP

Greenhouse Gas Emissions [t CO ₂ e]	2021	2022	2023
Total	3,121.34	4,398.52	8,442.13
Scope 1	418.58	591.14	825.53
Car fleet	418.58	591.14	825.53
Scope 2	378.03	457.01	584.03
Purchased electricity ⁹	75.70	93.97	88.42
Purchased heat	254.38	268.67	294.38
Purchased cooling	3.76	17.79	5.36
Electricity for electric vehicles	44.19	76.77	195.87
Scope 3	2,324.73	3,350.37	7,032.58
Purchased Goods and services	235.41	279.66	2,753.85
Capital Goods	<i>Data limitations</i>		333.43
Fuel- and Energy-Related Activities Not Included in Scope 1 or 2	127.01	171.59	157.24
Upstream Transportation and Distribution	<i>Data limitations</i>		0.12
Waste Generated in Operations	<i>Data limitations</i>	101.63	66.12
Business Travel	378.86	893.93	1,272.52
Employee Commuting	1,583.46	1,903.55	2,236.55
Upstream Leased Assets	<i>Data limitations</i>		16.18
Downstream Transportation and Distribution	<i>Not applicable</i>		
Processing of Sold Products	<i>Not applicable</i>		
Use of Sold Products	<i>Data limitations</i>		196.56
End-of-Life Treatment of Sold Products	<i>Not applicable</i>		
Downstream Leased Assets	<i>Not applicable</i>		
Franchises	<i>Not applicable</i>		
Investments	<i>Not applicable</i>		

⁹ Numbers shown are market-based emissions; location-based emission numbers are: 2021: 249.28 t CO₂e; 2022: 265.59 t CO₂e; 2023: 292.85 t CO₂e

11.1 Emission calculation methodology

The emissions taken into account for the calculation of the CCF (company carbon footprint) of VTU cover all emissions of VTU GROUP (no equity share approach) and take into account all greenhouse gases covered by the Kyoto Protocol¹⁰.

Emissions were calculated using the software SimaPro (using Global Warming Potential 100). For consumption data primary data was used as far as possible. If no primary data was available, secondary data from recognized sources was used.

The emission factors used were taken from scientifically recognized databases such as Ecoinvent and DEFRA.

Details on the different categories of the CCF calculations can be found in the following chapters.

Further comments regarding the CCF calculation:

- In 2020, the emissions have not yet been calculated with ClimatePartner. Due to the different calculation method, only the km data published in the VTU CSR Report 2020 can be compared with 2021 and 2022, but not the associated emissions.
- In 2021, data from the subsidiary ifss included only site consumption (Scope 2) and employee commuting (Scope 3); in 2022, the categories “water” and “waste” were also included in Scope 3.
- The recording accuracy of the train km could be significantly increased in 2022; the higher number of train km recorded in 2022 has a major influence on the result.
- In 2023, the emissions have been calculated internally using SimaPro Software. To enable comparability the emissions of 2021 and 2022 have been recalculated with the same methodologies and emission factors. Therefore the results in Table 21 can be different to the results reported in the sustainability reports and Facts & Figures sheets (calculated by ClimatePartner) of the last two years.
- Due to an extension of categories and input data for scope 3 emissions in 2023, the associated numbers may not be fully comparable with those of previous years.

11.2 Calculation data

11.2.1 Scope 1

11.2.1.1 Car fleet

VTU operates a car fleet consisting of pool cars and company cars dedicated to specific persons.

Table 22: Car fleet data

	Unit	2021	2022	2023
Number of cars	#	81	95	143
Electric vehicles	%	16.0	17.9	33.6
Hybrid vehicles	%	14.8	14.7	11.2
Gasoline/diesel vehicles	%	69.1	67.4	55.2
Distance travelled	km	1,411,126	2,055,057	3,254,020

¹⁰ carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluoro-carbons (PFCs), sulfur hexafluoride (SF₆) and nitrogen trifluoride (NF₃).

11.2.2 Scope 2

11.2.2.1 Purchased Energy

Purchased energy is directly related to the amount of office space.

Table 23: Data on purchased energy

	Unit	2021	2022	2023
Office space	m ²	15,458	19,050	21,584
Electricity	kWh	789,802	816,677	906,443
Thereof green electricity	%	66.5	59.1	60.7
Heating	kWh	1,358,726	1,545,429	1,564,740
Cooling	kWh	15,250	72,552	33,473

11.2.3 Scope 3

11.2.3.1 Purchased Goods and Services

Material

The use of materials is not considered to be significant for VTU as a provider of services. The main input materials for VTU are office material and IT equipment.

Subcontractor services

VTU is purchasing subcontractor services for engineering services it cannot offer due to lack of knowledge or manpower.

Emissions of subcontractor services have been calculated with a spend-based approach, utilizing an emission factor derived from VTU's own emissions, as the subcontractor services purchased are similar to VTU's services.

This emission source has been assessed for the first time in 2023, leading to a significant increase in scope 3 emissions.

Water

The water consumption data is based on meter values where available.

At those VTU sites where no real consumption values were available, these were extrapolated. The extrapolations were made using a specially calculated average value for water consumption (2.42 m³ per year and per FTE) based on the 18 sites from which real consumption values were available.

Table 24: Data on water consumption

	Unit	2021	2022	2023
Water consumption	m ³	data limitations	2,550.7	2,573.4

11.2.3.2 Capital Goods

Capital goods purchased by VTU comprise mainly of office furniture and software.

11.2.3.3 Fuel- and Energy-Related Activities Not Included in Scope 1 or 2

In this category the upstream emissions of purchased electricity, heat and cooling as well as transport and distribution losses are included.

11.2.3.4 Upstream Transportation and Distribution

VTU is mainly buying office and IT equipment, the upstream transport emissions are included in the emission factors used for these items in category purchased goods.

VTU distributes IT equipment from some main locations to all branch offices. The emissions of this distribution is accounted for in this category.

11.2.3.5 Waste Generated in Operations

Consumable material that is purchased by VTU and therefore creates waste consists of:

Copy paper A4 and A3, plotter paper, data protection paper (separate disposal), toner cartridges, electrical appliances, toilet paper, soap, paper towels (sanitary), hygienic paper (wipes), various envelopes, illuminants, lamps, various chemicals in small quantities in use in the technical centre at the Grambach site.

Table 25: Data on waste

	Unit	2021	2022	2023
Waste	m ³	data limitations	157.24	177.19
Hazardous waste	t	data limitations	data limitations	3.01

The amount of waste generated at all VTU locations was extrapolated using the usable office space and average values for kg of waste per year and m². For this purpose, the waste categories separated at each location were collected by questionnaire and multiplied by the respective factor for these waste categories (mixed municipal waste, cardboard/paper/cardboard, organic waste, packaging from dual systems, glass (coloured/white)).

Hazardous waste generated by VTU consists of batteries from IT equipment (0.13 t) and hazardous chemicals utilized in VTU's R&D facility in Grambach (2.88 t; no other locations house R&D facilities).

11.2.3.6 Business Travel

Business travel is divided into travel by car, plane and train. In addition the overnight stays in hotels are included in the emission calculation of business travel.

Table 26: Data on business travel

	Unit	2021	2022	2023
Car travel	km	774,754	1,627,025	2,224,723
Air travel	km	512,651	836,018	1,408,920
Rail travel	km	328,907	1,463,835	1,178,721

11.2.3.7 Employee Commuting

To analyzed employee commuting a survey is made on a regular basis. Results are then extrapolated to the whole workforce.

In addition to the commuting the emissions related to home office is included in this category.

Table 27: Data on employee commuting

	Unit	2021	2022	2023
Bike/Electric Bike	km	124,030	304,482	810,651
Car	km	3,546,855	4,521,721	5,342,201
Electric car	km	74,792	115,266	270,330
Motorscooter/Motorbike	km	43,225	71,315	78,422
Public Transport	km	367,962	653,593	472.557
Train	km	629,390	1,311,114	1,278.188

11.2.3.8 Upstream Leased Assets

VTU leases printers for its offices.

11.2.3.9 Downstream Transportation and Distribution

The direct “products” of VTU are projects and files that are mainly created using digital media, office materials and paper documents.

No relevant amounts of physical products are transported and distributed and thereby this emission category for VTU is not applicable.

11.2.3.10 Processing of Sold Products

The direct “products” of VTU are projects and files. These products do not need to be processed.

Thereby this emission category for VTU is not applicable.

11.2.3.11 Use of Sold Products

The direct “products” of VTU are projects and files. These products do not create emissions when being used.

VTU does not build turn key plants, where VTU would act as producer of the plant as a whole and not only the concept and design, in a significant amount (< 1 % of revenue), therefore emissions from such turn key plants have not been included in the emission calculation scope.

VTU develops software solutions that are sold to customers. The emissions of software use has been taken into account in the CCF in 2023.

11.2.3.12 End-of-Life Treatment of Sold Products

The direct “products” of VTU are projects and files. These products do not need end of life treatment.

VTU does not build turn key plants, where VTU would act as producer of the plant as a whole and not only the concept and design, in a significant amount (< 1 % of revenue), therefore emissions from end-of-life treatment of such turn key plants have not been included in the emission calculation scope.

Thereby this emission category for VTU is not applicable.

11.2.3.13 Downstream Leased Assets

VTU does not lease assets to other parties.

Thereby this emission category for VTU is not applicable.

11.2.3.14 Franchises

VTU is not in the market of franchises.

Thereby this emission category for VTU is not applicable.

11.2.3.15 Investments

VTU does not an investment company.

Thereby this emission category for VTU is not applicable.

12 GRI Index Table

GRI Standard	Disclosure	Reference
GRI 2: General Disclosures 2021	2-1 Organizational details	4
	2-2 Entities included in the organization's sustainability reporting	4
	2-3 Reporting period, frequency and contact point	see VTU CSR-Report
	2-4 Restatements of information	19, 20
	2-5 External assurance	see VTU CSR-Report
	2-6 Activities, value chain and other business relationships	4, 5 & see VTU CSR-Report
	2-7 Employees	9, 10, 11 & see VTU CSR-Report
	2-8 Workers who are not employees	11
	2-9 Governance structure and composition	6 & see VTU CSR-Report
	2-10 Nomination and selection of the highest governance body	7
	2-11 Chair of the highest governance body	6 & see VTU CSR-Report

	2-12 Role of the highest governance body in overseeing the management of impacts	7 & see VTU CSR-Report
	2-13 Delegation of responsibility for managing impacts	7 & see VTU CSR-Report
	2-14 Role of the highest governance body in sustainability reporting	6 & see VTU CSR-Report
	2-15 Conflicts of interest	see VTU CSR-Report
	2-16 Communication of critical concerns	17
	2-17 Collective knowledge of the highest governance body	7
	2-18 Evaluation of the performance of the highest governance body	6, 7
	2-19 Remuneration policies	13
	2-20 Process to determine remuneration	13
	2-21 Annual total compensation ratio	15
	2-22 Statement on sustainable development strategy	see VTU CSR-Report
	2-23 Policy commitments	see VTU CSR-Report
	2-24 Embedding policy commitments	see VTU CSR-Report

	2-25 Processes to remediate negative impacts	17 & see VTU CSR-Report
	2-26 Mechanisms for seeking advice and raising concerns	17
	2-27 Compliance with laws and regulations	17
	2-28 Membership associations	see VTU CSR-Report
	2-29 Approach to stakeholder engagement	8 & see VTU CSR-Report
	2-30 Collective bargaining agreements	13
GRI 3: Material Topics 2021	3-1 Process to determine material topics	see VTU CSR-Report
	3-2 List of material topics	see VTU CSR-Report
	3-3 Management of material topics	see VTU CSR-Report
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	5
	201-2 Financial implications and other risks and opportunities due to climate change	see VTU CSR-Report
	201-3 Defined benefit plan obligations and other retirement plans	15
	201-4 Financial assistance received from government	6
GRI 202: Market Presence 2016	202-2 Proportion of senior management hired from the local community	9

GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	see VTU CSR-Report
	203-2 Significant indirect economic impacts	see VTU CSR-Report
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	18
	205-2 Communication and training about anti-corruption policies and procedures	13, 17
	205-3 Confirmed incidents of corruption and actions taken	17
GRI 206: Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	17
GRI 301: Materials 2016	301-1 Materials used by weight or volume	21
GRI 302: Energy 2016	302-1 Energy consumption within the organization	21
	302-2 Energy consumption outside of the organization	21
	302-3 Energy intensity	15
	302-4 Reduction of energy consumption	see VTU CSR-Report
	302-5 Reductions in energy requirements of products and services	see VTU CSR-Report
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	see VTU CSR-Report
	303-5 Water consumption	21
GRI 304: Biodiversity 2016	304-2 Significant impacts of activities, products and services on biodiversity	see VTU CSR-Report



GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	19, 20 & see VTU CSR-Report
	305-2 Energy indirect (Scope 2) GHG emissions	19, 20, 21 & see VTU CSR-Report
	305-3 Other indirect (Scope 3) GHG emissions	19, 20, 22, 23, 24 & see VTU CSR-Report
	305-4 GHG emissions intensity	15
	305-5 Reduction of GHG emissions	see VTU CSR-Report
	305-6 Emissions of ozone-depleting substances (ODS)	see VTU CSR-Report
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	see VTU CSR-Report
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	22
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	17
	308-2 Negative environmental impacts in the supply chain and actions taken	18 & see VTU CSR-Report
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	see VTU CSR-Report
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	11
	401-3 Parental leave	15
GRI 402: Labor/Management Relations 2016	402-1 Minimum notice periods regarding operational changes	11, 12
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	see VTU CSR-Report

	403-2 Hazard identification, risk assessment, and incident investigation	see VTU CSR-Report
	403-3 Occupational health services	16
	403-4 Worker participation, consultation, and communication on occupational health and safety	16
	403-5 Worker training on occupational health and safety	17 & see VTU CSR-Report
	403-6 Promotion of worker health	17
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	16
	403-8 Workers covered by an occupational health and safety management system	16
	403-9 Work-related injuries	16
	403-10 Work-related ill health	16
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	16
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	12
	405-2 Ratio of basic salary and remuneration of women to men	6 & see VTU CSR-Report
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	13, 14
GRI 410: Security Practices 2016	410-1 Security personnel trained in human rights policies or procedures	17, 18
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	see VTU CSR-Report

	414-2 Negative social impacts in the supply chain and actions taken	18 & see VTU CSR-Report
GRI 415: Public Policy 2016	415-1 Political contributions	18 & see VTU CSR-Report
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	see VTU CSR-Report
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	see VTU CSR-Report
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	17
GRI 419: Socioeconomic compliance 2016	419-1 Non-compliance with laws and regulations in the social and economic area	18