2019 Annual Report
With figures that everyone can understand

EUR 3,028m
Revenue

EUR 4,091m
Property, plant and equipment

EUR 1,095m
Investment

EUR 299m
Profit for the year

WIENER STADTWERKE

Our results at a glance

Turn to page 12 for intuitive explanations.

STATEMENT OF PROFIT OR LOSS

EUR m	2019	2018
C3 Revenue	3,028	2,754
Other income	553	512
C4 Raw material, consumables and services used	-1,332	-1,100
A4 Personnel expenses	-1,067	-1,037
C4 Other expenses	-702	-659
Net gains on investments accounted for using the equity method	64	64
Earnings before interest, tax, depreciation and amortisation (EBITDA)	**544**	**535**
Depreciation and amortisation	**-271**	**-255**
Impairment losses and gains	76	24
Operating profit (EBIT)	**349**	**303**
Interest income	14	21
Other finance income	39	52
Interest expense	-98	-114
Other finance costs	-3	-48
Net finance costs	**-49**	**-90**
Profit before tax	**300**	**213**
Income tax expense	-1	-4
A3 **Profit for the year from continuing operations**	**299**	**208**
Profit for the year	**299**	**208**

EUR 299m
Profit for the year from continuing operations

B1 B2 **EUR 1,095m**
Investment

A4 **EUR 1,067m**
Personnel expenses

C3 **EUR 3,028m**
Revenue

C4 **EUR 2,034m**
Raw material and consumables used, and other expenses

Other sources: B1, B2 – see IFRS financial report;
C1, C2 – see sustainability report

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

EUR m	31 Dec. 2019	31 Dec. 2018	1 Jan. 2018
ASSETS			
Property, plant and equipment	4,091	3,907	3,787
Intangible assets	158	145	142
Investments accounted for using the equity method	166	379	314
Non-current financial assets	3,500	2,626	2,373
Other non-current assets	415	240	201
Non-current regulatory assets	1,216	1,278	1,345
Non-current assets	**9,547**	**8,574**	**8,162**
Inventories	229	202	109
Trade receivables	243	299	368
Current financial assets	582	408	558
Other current assets	300	158	147
Current regulatory assets	63	71	75
Cash and cash equivalents	450	611	663
Current assets	**1,866**	**1,750**	**1,920**
TOTAL ASSETS	**11,413**	**10,325**	**10,083**
EQUITY AND LIABILITIES			
Equity	**3,555**	**3,356**	**2,289**
Long-term borrowings	411	425	375
Employee benefit provisions	4,637	4,076	5,074
Other long-term provisions	393	267	230
Other non-current liabilities	804	800	797
Deferred tax liabilities	103	69	18
Non-current liabilities	**6,348**	**5,637**	**6,493**
Short-term borrowings	216	151	202
Trade payables	363	435	392
Other short-term provisions	41	43	67
Other current liabilities	890	702	639
Current liabilities	**1,510**	**1,331**	**1,300**
TOTAL EQUITY AND LIABILITIES	**11,413**	**10,325**	**10,083**

EUR 4,091m
Property, plant and equipment

EUR 3,555m
Equity

99.99%
Security of supply

0.0%
Proportion of nuclear energy used

Wiener Stadtwerke in profile

Wiener Stadtwerke is the biggest infrastructure operator in the greater Vienna area. The Group comprises Wien Energie, Wiener Netze, Wiener Linien, Wiener Lokalbahnen, WIPARK, Facilitycomfort, Upstream Mobility, and Bestattung und Friedhöfe Wien.

Wiener Stadtwerke has a clear mandate: it supplies the people living in Vienna with essential services and operates the facilities people need in their daily lives. The focus is on energy and transport, where the emphasis is on ensuring accessibility for all. Day in, day out, the companies in the Wiener Stadtwerke Group are hard at work around the clock safeguarding and improving essential services in Vienna.

Wien Energie

Always well supplied: two million people, 230,000 commercial and industrial customers and 4,500 agricultural businesses rely on Wien Energie, the nation's largest energy supplier. Wien Energie generates electricity and heat from renewable energy sources, as well as at energy-from-waste plants and high-efficiency combined heat and power (CHP) plants.

WIEN ENERGIE

Wiener Netze

Reliable: Wiener Netze is Austria's largest combined system operator. Extending for more than 30,000 kilometres, the network covers electricity, gas and district heating, as well as telecommunications. With reliability at 99.99%, it is one of best and most dependable anywhere in the world.

WIENER NETZE

Wiener Linien

Mobile: Wiener Linien is responsible for building and operating the city's underground, bus and tram network, making sure that its 2.6 million daily users arrive at their destination quickly, easily and on time.

WIENER LINIEN

Wiener Lokalbahnen

On a roll: Wiener Lokalbahnen operates the Badner Bahn, handles trans-European rail freight and helps people with restricted mobility to reach their destination.

WIENER LOKALBAHNEN

Wipark

Secure parking: Wipark Garagen GmbH is one of Austria's leading car park operators. It offers more than 20,000 parking spaces at its 70-plus safe, clean and well-lit facilities in Vienna and Lower Austria.

WIPARK

Bestattung & Friedhöfe

Reverence: Bestattung und Friedhöfe GmbH is Vienna's central provider of funeral and cemetery services. It manages more than 550,000 burial plots at 46 cemeteries in the city. Each year it conducts around 14,000 burials and cremations.

B&F WIEN

2019 Annual Report

With figures that everyone can understand

We explain the core topics of Wiener Stadtwerke and the underlying new.

Content

Introduction

A new way of looking at our figures

Report supplement – a look behind the figures

MOBILITY

ENERGY

GENERAL TOPICS

Dear Viennese,
Ladies and gentlemen,

We are living in a time in which health is paramount and the economy is being pushed into the background. In this age of Covid-19, we have a particular responsibility to society in our role as an energy and transport infrastructure service provider. At Wiener Stadtwerke we have continued to deliver uninterrupted supplies of electricity, gas and heating, and have operated a public transport network at the very highest level for the residents of Vienna at all times.

For this, we owe our dedicated employees a debt of gratitude and would like to take this opportunity to thank them for all their hard work. They spared no effort in ensuring that the infrastructure continued to run at a world-class level, despite the difficult conditions facing them. Some gave up their private lives completely for several weeks, voluntarily self-isolating themselves in power stations so that energy delivery for the people of Vienna would be guaranteed whatever the circumstances. I would like to thank each and every employee for the contribution they made during this phase to keeping the City of Vienna's critical infrastructure going and their unwavering commitment to doing so in future. Thank you!

Business performance

Wiener Stadtwerke's productivity has risen sharply over the past few years. Healthy profitability across the board, streamlined structures and, above all, dedicated employees are a crucial part of this success. A strong, innovative mindset and safeguarding security of supply are the cornerstones that will permit Wiener Stadtwerke to go on successfully shaping the future of the city.

2019 was a highly successful year for Wiener Stadtwerke. We reported profit for the year of EUR 299m, up from EUR 208m a year earlier, and revenue of EUR 3,028m. This strong operating profit will be invested in safeguarding the Group's future and, as a result, that of the city, too. We will make sure that the city's residents continue to have access to innovative, modern and reliable products and services of the very highest quality – which is far from a given, especially in light of the bleak economic forecasts.

In 2019 the Group changed its accounting principles, adopting international reporting standards. The consolidated financial statements were prepared in accordance with International Financial Reporting Standards (IFRS) as adopted in the EU, meaning that our performance can be compared more easily on an international level.

Outlook

We have earmarked a total of EUR 4.7bn for investment in Vienna between 2020 and 2024, which will underpin continued provision of essential energy and transport infrastructure. This amount is spread between all of the Group companies, with the largest share allocated to Wiener Linien at EUR 2.0bn. Wiener Netze will receive EUR 1.4bn and Wien Energie EUR 1bn. As a core investor in the greater Vienna area, we make a significant contribution to achieving the goals set by the City of Vienna through various infrastructure development, climate and environmental protection, and innovation promotion measures. This helps to secure jobs in the region, but also enables us to protect the planet and ensure a brighter future for generations to come.

We are working hard to bundle our services, so that we can offer them to our customers as packages. To help facilitate this, we are opening Wiener Stadtwerke's first flagship store in 2020, which will provide a central point of contact for our customers in all matters. Our mission is to provide the population of the greater

Vienna area with the best possible and most uncomplicated transportation, energy and funeral services, with a clear focus on customers' needs. We will also place a particular emphasis on upholding the highest quality, environmental and social responsibility standards, as well as efficient and sustainable use of the resources available to us. Our goal is for the Wiener Stadtwerke Group to continue to guarantee provision of essential services and a high quality of life for the population of Vienna in future.

Here, we maintain an unwavering focus on conserving resources as far as possible, adding value for the region and securing jobs. Social responsibility and profitability are equally important, overarching goals.

In this report we have listed the individual areas that are important to us and our stakeholders – and which have the greatest impact on Vienna – and categorised them from A1-C4. We have also explained the key topics and figures behind them in a new and straightforward way.

Thank you

We would like to express our sincerest thanks to all our employees and partners who have helped to sustain the success of Wiener Stadtwerke. The outstanding quality of life in Vienna is thanks in no small part to the professionalism and commitment of our approximately 15,000 employees. This performance comes as a clear confirmation that we can carry on succeeding commercially while still living up to our social responsibilities.

June 2020

Martin Krajcsir
Chief Executive Officer

Peter Weinelt
Deputy Chief Executive Officer

KROMUS

Foreword

Ulli Sima

Executive City Councillor for the Environment and Vienna Public Utilities

Vienna is the world's most liveable city. It is no secret that efficient infrastructure is the key to a city as successful as this. Expansion of the public transport network, which Wiener Stadtwerke is driving forward, and reliable supplies of electricity, gas and heating have a significant bearing on why people love living in Vienna. To ensure things stay that way, Wiener Stadtwerke sets aside around EUR 1bn for investment in infrastructure each year, the benefits of which are felt directly by the city's residents and also indirectly in the form of induced GDP and secure jobs. Wiener Stadtwerke has continued to keep Vienna's urban infrastructure and, as a result, the city running during the ongoing coronavirus crisis. From the energy sector, where Wiener Netze and Wien Energie ensure outstanding supply security for Vienna, to Wiener Linien and Wiener Lokalbahnen, which continue to deliver exceptional quality public transport services under challenging conditions. And the dignified funeral services provided by Bestattung Wien with its respectful approach to death during these sad times for so many people. I would also like to take this opportunity to highlight the strong partnerships between all of the City of Vienna's infrastructure companies.

The area under my remit brings together many of the city's vital services, from waste management and water to energy supply and public transport. These essential services are owned by the City of Vienna. Accordingly, our primary responsibility is to the city's residents. But we are also committed to boosting efficiency and have taken all the necessary steps to ensure our companies remain fit for purpose in the years to come. Wiener Stadtwerke is in the black while continuing to invest in the city's future – in environmentally-friendly energy and mobility, and in the employees responsible for supporting these innovations and implementing them. I am pleased that the changeover in accounting principles from the Austrian Business Code (ABC) to International Financial Reporting Standards (IFRS) provides an even clearer picture of just how strong a financial position Wiener Stadtwerke is in. Like virtually every other business, it will need this financial buffer given the current situation.

And finally, I would like to express my gratitude to Wiener Stadtwerke's employees for their outstanding work every day, around the clock. It is impossible to imagine Vienna without Wiener Stadtwerke – we are lucky to have it. In challenging times such as those we have been through in the past few months, this is truer than ever.

Ulli Sima
Executive City Councillor for the Environment and Wiener Stadtwerke

> Our investments are felt directly by the city's residents and also indirectly in the form of induced GDP.

Foreword

Erich Hechtner

Chairman of the Supervisory Board of Wiener Stadtwerke

Ensuring that the city continues to operate at a consistently high level is even more important in challenging times than it is under normal circumstances. With its wide array of urban infrastructure services, Wiener Stadtwerke is particularly critical to our city's essential services and quality of life. The City of Vienna is committed to not only upholding its outstanding quality standards, but also continuously enhancing them. At Wiener Stadtwerke, people have always been at the heart of everything we do. This is the touchstone for all the measures required to ensure that coming generations will continue to enjoy a secure and liveable future. It goes without saying that the need to plan for and safeguard the future also applies to successful local companies such as those that make up the Wiener Stadtwerke Group.

But we cannot lose sight of the fact that everything depends on the highly motivated and well trained employees who work so hard each day operating, maintaining and renewing Vienna's infrastructure. And it is our 15,000-strong workforce who can take credit for the excellent operating result we posted in 2019. During the emergence of the coronavirus crisis in early 2020, our employees showed what they are made of and what sacrifices they are prepared to make. And for that we owe them a debt of gratitude.

We will not allow ourselves to be knocked off course from our "Vienna model". Offering all current Vienna residents and future generations an assurance of comprehensive essential services – from housing to high social welfare standards and the vital services provided by Wiener Stadtwerke – calls for investment, and sometimes for swimming against the tide, for instance when it comes to privatisation. Wiener Stadtwerke will continue to make significant investments. Over the course of the next few years, billions of euros will be channelled into improving and extending the city's infrastructure in the interests of all the people who call the city home.

2019 was a very special year for Wiener Stadtwerke. One of the advantages of the changeover to International Financial Reporting Standards (IFRS) is that the Group's solid performance becomes immediately obvious at a glance. Unlike in previous years, Wiener Stadtwerke posted an operating profit running into the hundreds of millions of euros. It is no secret that Wiener Stadtwerke will need these reserves over the years to cushion the impact of the global economic downturn to come. And it will also help secure jobs and keep options open for the future. As the Chairman of the Supervisory Board and on behalf of the City of Vienna I would like to thank all concerned for their outstanding contribution.

Erich Hechtner
Chairman of the Supervisory Board
of Wiener Stadtwerke

> We guarantee comprehensive essential services – including for generations to come in Vienna.

Our core topics

Wiener Stadtwerke has identified and prioritised all of the topics related to successful and responsible management and sustainable leadership.

The Group is a modern infrastructure service provider, and one of Austria's largest conglomerates, investors and employers. The quality, reliability and safety of its services play a major part in Vienna's internationally acclaimed quality of life, which is attested to by independent studies. Wiener Stadtwerke embraces the responsibilities towards stakeholders that this entails and has incorporated them into its business policies as one of the fundamental principles that shapes its key decision-making processes.

As the next step, in order to break these responsibilities down into specific action areas and ensure that they are integrated into all management systems, the Group drew up a materiality matrix. This tried-and-tested sustainability management tool charts a company's impacts against the expectations of its stakeholders. The outcome allows businesses to prioritise specific areas that are of particular significance to management. In keeping with the comprehensive scope of modern sustainability concepts, these individual areas cover the full spectrum of

commercial, environmental and social considerations under a framework known as the triple bottom line.

The materiality matrix flags up the key areas for the sustainable management of Wiener Stadtwerke. An online survey determined the importance of the individual categories from the perspective of the Group's core stakeholders. Employees, customers and external experts were all involved in the evaluation process. The relative importance of the topics covered by the survey were charted on the Y axis and plotted against the absolute, measurable relevance of each point for Wiener Stadtwerke. Outcomes deemed to be particularly significant under both criteria were categorised as the most important topics and subsequently adopted in Wiener Stadtwerke's control systems.

Key management focuses

Following analysis of the materiality matrix, seven topics were defined as being of particular importance for the management of Wiener Stadtwerke. As some are by their nature abstract, they were subsequently fleshed out before being reconciled to action areas. The process also involved prioritising topics by assigning them to categories A, B and C in line with their relative importance. Each individual topic was also matched to the segments within Wiener Stadtwerke's portfolio of products and services.

In total, 12 action areas were singled out as underpinning the successful and responsible management of Wiener Stadtwerke. In order to manage the action areas, each is assigned a performance indicator, which is evaluated in internal reporting on an ongoing basis and illustrates the effectiveness of management decisions. These key performance indicators are a particularly important aspect of the Group's external reporting activities.

> Employees, customers and external experts were all involved in the evaluation process.

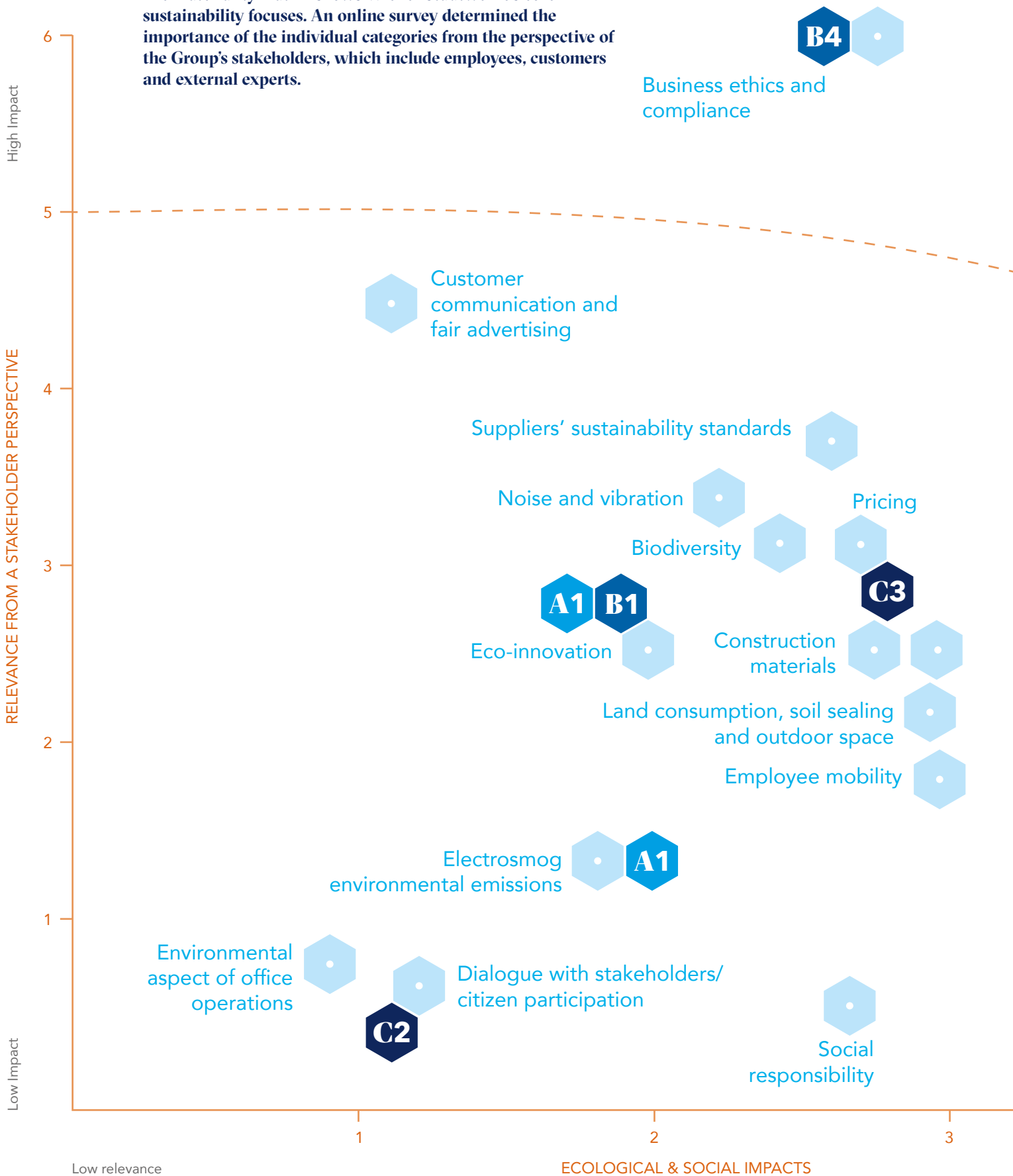
OVERVIEW OF A, B AND C TOPICS

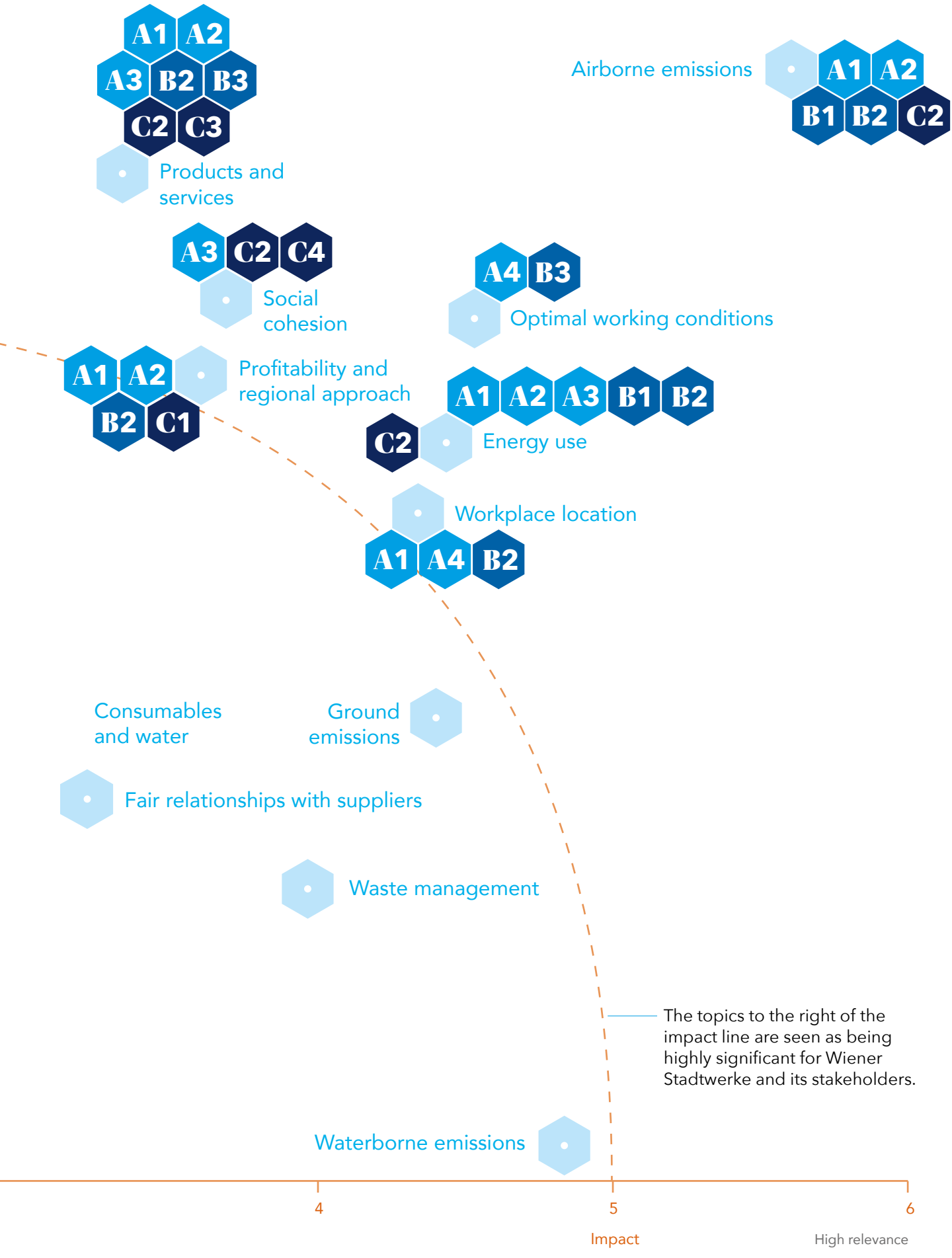
	Topics	Product and service portfolio		
		Energy	**Mobility**	**General Topics**
Impact on Vienna	A	Sector coupling[1] (energy teamwork)	Mobility hub and e-mobility[1]	Intelligent networking of the service portfolio Strategic staff development
	B	Expansion and development of renewable energy	Investment in opening up new routes	Focus on digitalisation, Data security and a zero-tolerance compliance policy
	C	Safeguarding supply security, Increasing energy efficiency[1]	Introducing new pricing models	Regional procurement and accountability along the supply chain[1]

1) with Sustainability Impact Environment

The materiality matrix of Wiener Stadtwerke

The materiality matrix shows Wiener Stadtwerke's core sustainability focuses. An online survey determined the importance of the individual categories from the perspective of the Group's stakeholders, which include employees, customers and external experts.




A1 A2 A3 B2 B3 C2 C3
Products and services
Airborne emissions
A1 A2 B1 B2 C2
A3 C2 C4
Social cohesion
A4 B3
Optimal working conditions
A1 A2 B2 C1
Profitability and regional approach
A1 A2 A3 B1 B2 C2
Energy use
Workplace location
A1 A4 B2
Consumables and water
Ground emissions
Fair relationships with suppliers
Waste management
Waterborne emissions
The topics to the right of the impact line are seen as being highly significant for Wiener Stadtwerke and its stakeholders.
4
5
6
Impact
High relevance

A new way of looking at our figures

Category A in the materiality matrix includes what we see as the important changes during the reporting period. The accompanying explanation describes the change and gives a brief overview of the reasons behind it.

→ Turn to page 42
Sector coupling (energy teamwork)

Energy and energy grids – property, plant and equipment

This item relates to the property, plant and equipment that Wiener Stadtwerke has acquired in the past, creating assets in the process. This indicator only includes the value of property, plant and equipment in the Group's Energy and energy grids segment.

EUR m	**2019**	2018	Change
	3,469.8	3,319.5	+4.5%

About this item

Wiener Stadtwerke's operations involve a wide range of different energy sources. All of these investments – less depreciation – are reported under the 'Property, plant and equipment' item in the statement of financial position, which shows the value of property, plant and equipment in the Energy and Energy Grids segment. These assets form the basis for efficient supplies of electricity generated from waste heat, as well as district heating, and the use of gas-fired power stations as part of our sector coupling efforts. Ongoing investments are designed to keep these assets in line with the technological state of the art and enhance their capacity.

How things currently stand

Non-current assets in this segment increased by EUR 150.3m due to the Group's significant investment in energy and energy grids (see indicator B1).

→ Turn to page 22
Mobility hub and e-mobility

Transport and car parks – property, plant and equipment

Property, plant and equipment that Wiener Stadtwerke has acquired over time, thereby creating assets, is shown under this item. This indicator only includes the value of property, plant and equipment in the Group's Transport and car parks segment.

EUR m	**2019**	2018	Change
	435.2	399.3	+9.0%

About this item

Promoting the development of e-mobility and positioning itself as a transport hub is a priority for Wiener Stadtwerke. By steadily expanding services that prevent emissions elsewhere (especially from cars), Wiener Stadtwerke makes a major contribution to improving air quality in Vienna. This demands ongoing investments in the necessary infrastructure.

How things currently stand

In spite of continued, substantial investment (see indicator B2), the value of non-current assets in this segment is relatively low, as the figure is netted off against investment grants received from the City of Vienna.

A new way of looking at our figures

A3

→ Turn to pages 30, 65
Intelligent networking of the service portfolio

Profit for the year from continuing operations

This is the most important measure of earnings in the statement of profit or loss. It shows the combined financial performance of all of Wiener Stadtwerke's divisions (Energy and Energy Grids, Transport and Car Parks, as well as Funeral Services and Cemeteries).

EUR m	**2019**	2018	Change
	299	208	+43.8%

About this item

Wiener Stadtwerke is increasingly focusing on an integrated service portfolio based on the interlocking of the various divisions. The aim is to continuously increase the number of users of the service portfolio by combining individual products, which in turn will result in improved operating profit for the entire Group. The Group's vision is centred on a one-stop-shop approach, and the swift, straightforward and transparent provision of services by the Group companies. Our financial performance is a core indicator of our success in pursuing this goal. It also forms the basis for future investment.

How things currently stand

Our operating profit rose by 44% in 2019. This strong performance was primarily due to growth – including revenue growth – in our core business. This development was also supported by improved net finance income, which was mainly due to lower interest rates and the optimised fund portfolio.

A4

→ Turn to page 70
Strategic staff development

Personnel expenses and pension provision

Personnel expenses show the expenses associated with employing the approximately 15,000 people who work for the Wiener Stadtwerke Group. The supplementary 'Pension provision' item on the statement of financial position, which shows the total obligations for future pension payments and termination benefits, is particularly important.[1]

EUR m	**2019**	2018	Change
Personnel expenses			
	1,067	1,037	+2.9%
Pension provision			
	4,637	4,076	+13.8%

About this item

Staff costs are important for Wiener Stadtwerke for two reasons. Firstly, they are a significant expense, so they have a significant impact on pre-tax profit (A3). As a result, it is important to carefully manage staff costs in order to achieve the Group's targets for this indicator. However, this figure is equally important in terms of our social responsibility to our employees and other stakeholders, which includes the obligation to provide appropriate employment conditions. Our activities in this regard focus on positioning Wiener Stadtwerke as a pioneering, sustainable employer. Ultimately, Wiener Stadtwerke's employment policy has an effect outside the Group: every job at Stadtwerke creates three others in Vienna. So this is also an important factor for value creation by the City of Vienna.

How things currently stand

In the previous financial year, staff costs and the pension provision were affected by non-recurring factors. The increase reported in the accounts was mainly attributable to the Transport Division, above all as a result of pay rises, the effects of the new collective agreement that came into effect on 1 November 2019 and the related increase in pension provisions.

1 In contrast, the annual allocation to these provisions is reported under staff costs.

Category B includes topics related to further important developments during the reporting period.

B1

→ Turn to page 48
Expansion and development of renewable energy

Energy and energy grids – investment

Funds spent by Wiener Stadtwerke on acquiring new non-current assets during the financial year are reported as investments. This indicator only shows the value of property, plant and equipment and intangible assets in the Group's Energy and energy grids segment.

EUR m	**2019**	2018	Change
	362.2	323.9	+11.8%

About this item

The reported figures mainly relate to ongoing additions and improvements to facilities for the generation and use of renewable energy forms. In the long term, the Group is targeting a renewable share of electricity generation of up to 50%. This will require substantial investment, and the Group plans to spend a total of EUR 2.4bn between 2020 and 2024.

How things currently stand

Investments in property, plant and equipment and intangible assets during the reporting period chiefly related to the expansion of regenerative generating plants (particularly photovoltaic systems), district cooling plants, district heating connections and existing plants. Grid capacity in the Gas and Heat departments was also increased. Investment rose by 11.8% compared with 2018.

B2

→ Turn to page 30
Investment in opening up new routes

Transport – investment

Wiener Stadtwerke's spending on the acquisition of new non-current assets during the financial year is reported as investments. This indicator only shows the value of property, plant and equipment and intangible assets in the Group's Transport Division.

EUR m	**2019**	2018	Change
	263.7	254.9	+3.5%

About this item

These figures mainly reflect investment in opening up new routes and lines for the Group's mobility and transport services. Ongoing maintenance and modernisation play a decisive role in our customers' satisfaction, and their willingness to take advantage of our services. The benefit for the city is currently being highlighted by the integration of newly developed areas into the underground network.

How things currently stand

About 40% of Wiener Linien's total investment (excluding financial assets) goes towards expanding the underground network. In 2019, investment mainly focused on the extension of the U2 to Matzleinsdorfer Platz, replacement of buses that had come to the end of their useful lives, replacement of obsolete trams with Flexity rolling stock, modernisation of the U4 and track renewal on the tram network. These investments were at the same high level reported in the previous year.

Equity

The figure for Wiener Stadtwerke's equity shows net assets following the deduction of all liabilities arising from assets that the Group holds.

EUR m	**2019**	2018	Change
	3,555	3,356	+5.9%

About this item

Equity serves as a risk buffer, laying the foundations for the Group's long-term financial stability. These reserves built up over time can be used to offset any future losses, especially in times of crisis. In addition, equity primarily provides leeway to make forward-looking investments in innovative new services. This means that a solid equity base reflects Wiener Stadtwerke's fitness for the future. This will both lay the groundwork for essential investments in the Energy, Energy Grids, Transport, Funeral Services and Cemeteries, and Car Parks divisions, and play a major part in increasing the already outstanding quality of life in Vienna. Digitalisation in all areas of operation and all processes plays a significant part in this context – at present, the emphasis is on developing new digital solutions for customers.

How things currently stand

Wiener Stadtwerke's equity ratio stood at 31.2% at the end of 2019. In view of the business models and market positions of the various divisions, this is a very strong figure that we aim to maintain at this level in future.

→ Turn to page 75
Fit for the future with a focus on digitalisation

Other provisions

Provisions show obligations which may or may not become due, and for which the amount is also uncertain, but which are the result of past events. The 'Other provisions' item includes a range of eventualities for which provisions are recognised.

EUR m	**2019**	2018	Change
	433.4	310.0	+40.0%

About this item

At Wiener Stadtwerke, impending losses and potential costs arising from legal disputes are the most important aspects of other provisions.

How things currently stand

In 2019 there were no significant data breaches, so no provisions for these types of misconduct were recognised. The increase in the provision for impending losses was attributable to the marketing of electricity from procurement rights abroad and court cases against Energie Control Austria (E-Control) and the tax authorities.

→ Turn to page 79
Data security and a zero-tolerance compliance policy

The remaining topics in the materiality analysis are allocated to category C.

→ Turn to page 56
Safeguarding supply security

Security of supply

E-Control defines security of supply as follows: "Security of supply means that electricity consumers are able to obtain electricity of defined quality when they need it, at cost-reflective and transparent prices."[2]

	2019	2018
Supply interruption electricity		
	24.31 min/year	26.65 min/year
Supply interruption gas		
	1.23 min/year	1.08 min/year
Availability of the district heating supply		
	99.99%	99.99%

About this item

Wiener Stadtwerke supplies gas and electricity to over a million households, around 230,000 small and medium-sized businesses, and 4,500 agricultural enterprises in Vienna and the immediate vicinity. The district heating network serves 350,000 households and large consumers. Every single customer should be able to depend on having Wiener Stadtwerke's services at their disposal around the clock and as required, in line with the usual quality standards.

How things currently stand

The level of supply security is 99.99%, and system non-availability in Vienna has been less than 30 minutes a year for several years now, meaning that the city's electricity supplies are among the most secure in Europe. Nevertheless, Wiener Netze is constantly working on further improvements to the electricity network. Smart grid operation will preserve outstanding security of supply, which in turn promotes social cohesion in the capital. The EUR 300m that the Group invests in the future-proof grid is a sign of its commitment to this principle.

→ Turn to page 56
Increasing energy efficiency

Energy use

This relates to the consumption of fuels from which Wiener Stadtwerke generates electricity and heat, such as natural gas, heating oil, waste and biomass.

	2019	2018
Share of renewable energy in electricity (consolidated)		
	13.3%	16.8%
Share of renewable energy in electricity (consolidated and investments)		
	16.5%	19.3%
Share of renewable energy in heat (consolidated)		
	18.3%	18.5%
Share of renewable energy in heat (consolidated and investments)		
	19.0%	22.1%
Share of fossil fuels		
	93.6%	86.5%
Share of nuclear power in energy use		
	0%	0%

About this item

Wiener Stadtwerke has implemented and supported numerous groundbreaking energy-efficiency projects. The Group aims to reduce energy consumption, both in its production processes and in terms of the energy services that its customers use. This reflects our commitment to hitting environmental and financial targets. We also see energy efficiency as a research topic, and we are currently investigating intelligent system operation.

How things currently stand

Total energy use has fallen over the years, thanks mainly to a reduction in heating oil and biomass consumption. By contrast, natural gas and waste have grown in importance. Overall, consumption of fossil fuels as a proportion of total energy use has risen slightly – measures and projects designed to counter this development are under consideration. Key initiatives in this regard include the Sonnenstadt Wien projects aimed at harnessing the power of sunlight and offsetting its negative effects, as well as the expansion of the district cooling network.

2) https://www.e-control.at/industrie/strom/versorgungssicherheit

Revenue

Revenue refers to all proceeds from a company's core operations generated within a specific period. Revenue is recognised when a business fulfils its obligations to a customer.

EUR m	**2019**	2018	Change
	3.028	2.754	+9,9%

About this item

Wiener Stadtwerke's service portfolio covers energy and transport, and services are provided in accordance with high quality, safety and environmental standards. Our Group strategy places customer needs at the heart of everything we do. As customers are highly price sensitive, it is important that we offer services under various pricing models. The launch of new services is designed to safeguard revenue in the long term. Innovative, customer-focused products and services help to consolidate the Group's market position, which in turn enables our customers to operate sustainably. The growth in our revenue underlines the extent to which we are succeeding in meeting the needs of our customers.

How things currently stand

The significant upswing in revenue during the reporting period was mainly the result of the extended service range. Energy accounts for the majority of the Wiener Stadtwerke Group's revenue by some distance. The growth in electricity revenue was chiefly accounted for by sales to the German market for hedging purposes, as well as increased output. Higher gas revenue was due to a rise in reselling. The positive effects of price model adjustments were seen above all in the Transport Division: at Wiener Linien, the rise in transport revenue was due to the steady growth in demand for annual season tickets, which continued to be fuelled by the product's attractiveness and reasonable price. The Wiener Lokalbahnen sub-group reported higher revenue from its travel service agreement and from tariffs for the Badner Bahn and bus lines.

→ Turn to page 65
Introducing new pricing models

Raw material and consumables used, and other expenses

This item includes all expenses for the procurement of raw materials and goods. It also comprises materials and supplies required for production processes, as well as purchased services. 'Other expenses' includes similar costs (excluding depreciation and amortisation and staff costs) that are generally indirectly related to production processes.

EUR m	**2019**	2018	Change
	2,035	1,759	+15.7%

About this item

The Group mainly makes purchases from local and regional suppliers, meaning that the majority of purchased services benefit regional companies. This underlines the Group's impact on the local economy and the various forms of support provided by Wiener Stadtwerke along the value chain. When it comes to procuring goods and services, the Group selects suppliers that share its sustainability-related values and vision.

How things currently stand

In procurement processes, environmental factors are taken into account in performance specifications, when determining technical specifications and by setting specific criteria for the award of contracts.

→ Turn to page 80
Regional procurement and accountability along the supply chain

Travelling by public transport reduces your carbon footprint.

Chief Executive Officer Martin Krajcsir on the strategy of Wiener Stadtwerke in the field of mobility – with the aim of the most liveable city in the world and to achieve climate neutrality.

Vienna is growing and is expected to have over two million inhabitants by 2030. We take this into account and invest 368 million euros in public transport.

Vienna has topped the international Mercer rankings for more than a decade, earning it the title of the World's Most Liveable City. Its outstanding public transport network has been a decisive factor in its consistently strong showing. Is there a secret to this success?

Martin Krajcsir There's no secret, you just have to keep on planning ahead and investing. You have to ask yourself what will take the city forward, what do we have to set in motion to provide the best public transport network in five, ten or 20 years. Being the world's most liveable city is one thing, staying on top of the game is another. The measures that we put in place today help to safeguard our future quality of life. The U2/U5 intersection is the most complex construction project in the history of Vienna's underground network. Work is already in full swing to ensure that we finish on schedule in 2027. We are taking pressure off existing routes and planning connections for people who do not even live along them yet. Urbanisation is a global trend that we are also experiencing in Austria. Vienna is growing and is set to have a population of more than two million by 2030. We are already taking this into account and investing EUR 368 million in 2020 in extending the public transport network as well as various environmental-protection measures including greening bus and tram shelters and introducing turfed tram tracks.

As with many other areas of business and life, transport and mobility is currently in a period of transformation. Where do you see the biggest challenges?

MK The biggest challenge for Wiener Stadtwerke is the same as the one facing society as a whole. We want – and need – a climate-neutral future, and this is where public transport plays such a key role. Few people are aware of it, but the vast majority of passengers – 80% – are already being transported by electicity-powerd trams. And we are gradually converting the bus fleet, too. Partly through electric buses – some routes are already electric-only – but that doesn't go far enough for us, which is why we are investing EUR 25m in emission-free vehicles. We became the first city in Europe to introduce 12-metre-long electric buses and we're planning a dedicated competence centre for e-buses in the south of Vienna. Meanwhile, we are also testing hydrogen-powered buses. We want to know what is possible and what makes the most sense, and to make sure we continue to lead the way internationally. The fact is that Vienna's public transport network cuts harmful CO_2 emissions by one million tonnes a year. Digitalisation also has a part to play in many different areas. Here I would like to single out one example we are particularly proud of, and which illustrates this particularly well: our app. The Qando app was a decade-long success story that is set to continue in WienMobil, its new iteration. Among other things, I can add my annual pass directly to the app, I can use it to book car-sharing services or taxi rides directly, or check the availability of hire bikes nearby. Timetable information is updated in real time, and I can plan my journey down to the very last minute. This meets the needs of our customers and highlights Wiener Linien's service-driven mentality.

You just touched on the topic of urbanisation. Vienna's population is set to pass two million by 2030, with an additional three-quarters of a million people in the surrounding area. Are you taking steps to prepare public transport infrastructure for this?

MK Yes, very much so. We are working closely with neighbouring communities when it comes to planning links. We make sure that connections are aligned so that using the service is as appealing as possible and journeys can be made conveniently by public transport. Here, efficiency of coverage is essential. Yes, the city is growing, but its area is not. The amount of space covered by the public transport network is equivalent to around one percent of Vienna's total area, but public transport accounts for about 38% of all journeys made. As far as new urban development projects are concerned, we are ready to go long before new residents have finished moving in. Multimodal transport is the watchword here, particularly in connection with commuting. Our goal is to make the changeover as attractive as possible, so that people are able – and want – to do without their cars as far as possible. And it is working: car traffic was down 4 percentage points year on year in 2019.

Can we expect the price of using public transport in Vienna to increase in future?

MK Vienna's public transport system is affordable for everyone, as an international comparison makes even clearer. An annual season ticket costs EUR 1,459 in Berlin, and as much as GBP 4,000 in London. But let's take a closer look. In 2011 we sold 363,000 annual passes and now there are more than 850,000 annual season ticket holders. This means that the public transport network is used more often, and intervals between services are shorter, which leads to increased demand and so on. We are up to almost a billion passengers a year, and numbers are rising all the time. And we have the affordable annual season ticket to thank for these increases. The corona crisis will influence this, but we are confident that we will soon return to the 2019 level.

Let's turn to the question of carbon neutrality: rethinking transport is a central factor on the way to achieving this goal. What measures is Wiener Stadtwerke taking and what do you see as your personal role in this?

MK The best thing from an environmental point of view is if people leave their cars at home. This will happen if we give people an incentive to make the changeover to public transport. The underground generates 3% of CO_2 equivalent emissions, but accounts for a fifth part of all transport in the city. Specifically, anyone who switches from their car to public transport helps to cut emissions by 1,500kg a year. We've launched a public awareness campaign with the message: travelling by public transport reduces your carbon footprint.

The public transport's share of the modal split in Vienna was 38% in 2019. Could you explain to us what exactly is meant by the term 'modal split'?

MK The model split shows which journeys in the city are made using which mode of transport. This split breaks down into four categories: car, bike, public transport and finally walking. At the moment we are at 38%, which is among the best in the world. By comparison, the share is 22% in Hamburg and 24% in Munich

Which means that things are looking good and you are confident?

MK They aren't just looking good, but genuinely world class. We are doing everything we can to make sure that we remain the world's most liveable city.

> In 2019, 38% of transport routes were covered by public transport.

We keep Vien

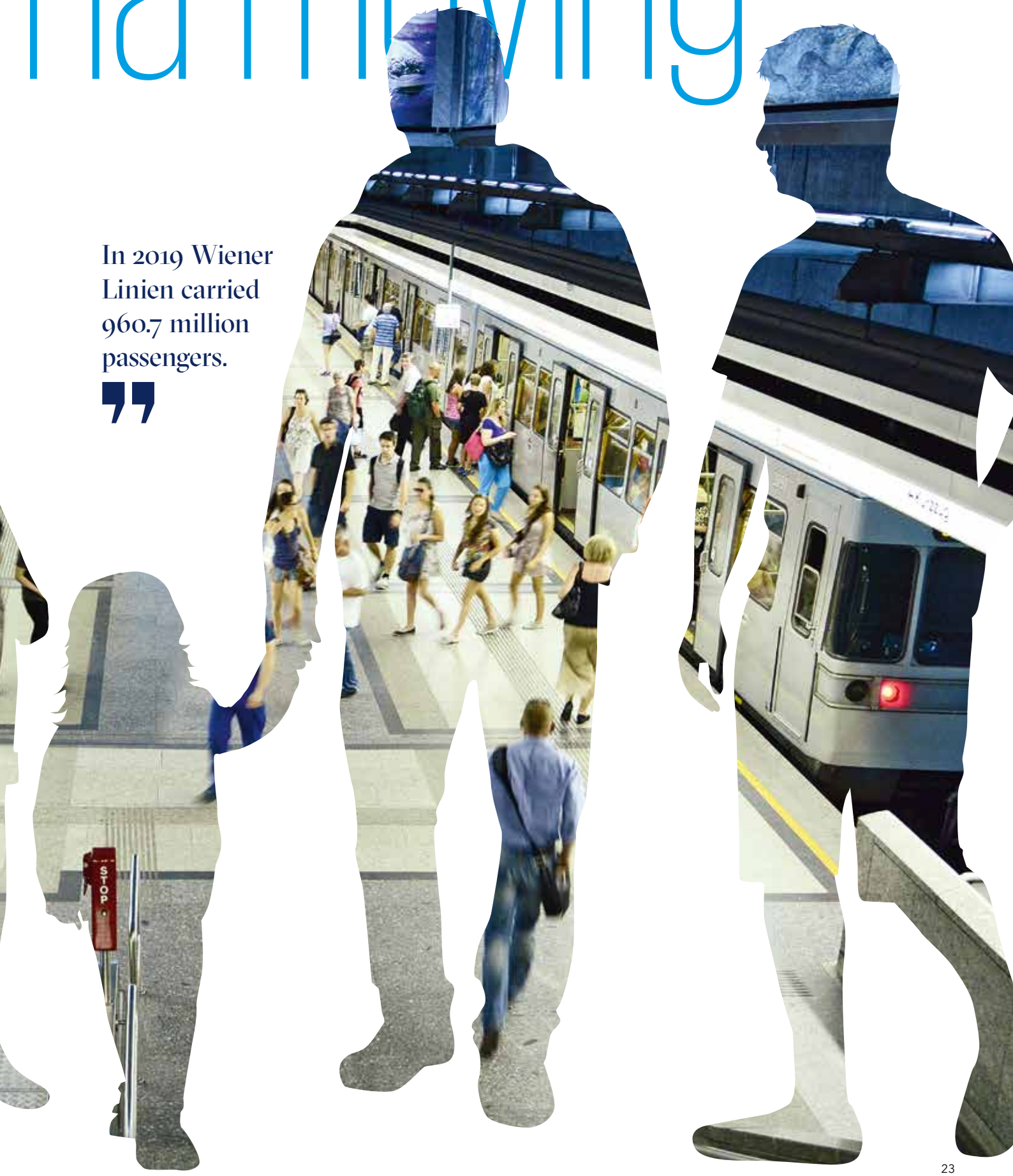
Joined-up transport services – the underground, bus and tram network makes sure that millions of people in Vienna reach their destinations quickly and conveniently every day. Safety and reliability are just as important as environmental protection.

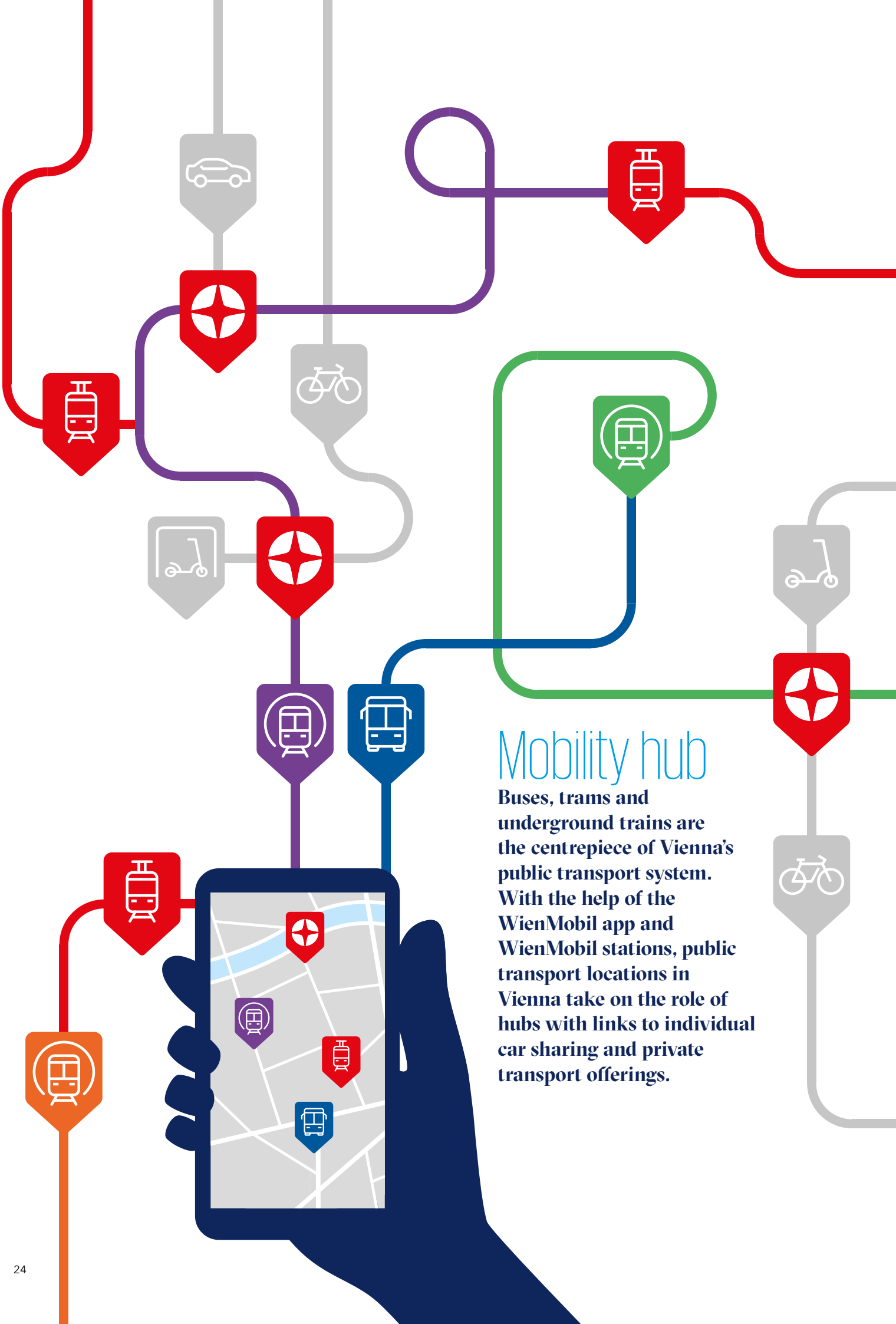
A2
TRANSPORT HUB AND E-MOBILITY

Transport and Car Parks – property, plant and equipment
→ See page 12 for details

na moving

In 2019 Wiener Linien carried 960.7 million passengers.





Mobility hub

Buses, trams and underground trains are the centrepiece of Vienna's public transport system. With the help of the WienMobil app and WienMobil stations, public transport locations in Vienna take on the role of hubs with links to individual car sharing and private transport offerings.

Transport – and regional public transport in particular – has to satisfy three central criteria: it needs to be convenient, it needs to be quick and it needs to consume as few resources as possible. Climate neutrality calls for sustainable transport. And to make this possible, public and private transport solution providers need to ensure that their products and services are integrated as seamlessly as possible. In such a way that people can use them both to travel to work each day, and to plan and book spontaneous trips – quickly and in one place.

Wiener Linien's responses to this challenge are the WienMobil stations in the real world and the WienMobil app in the digital world.

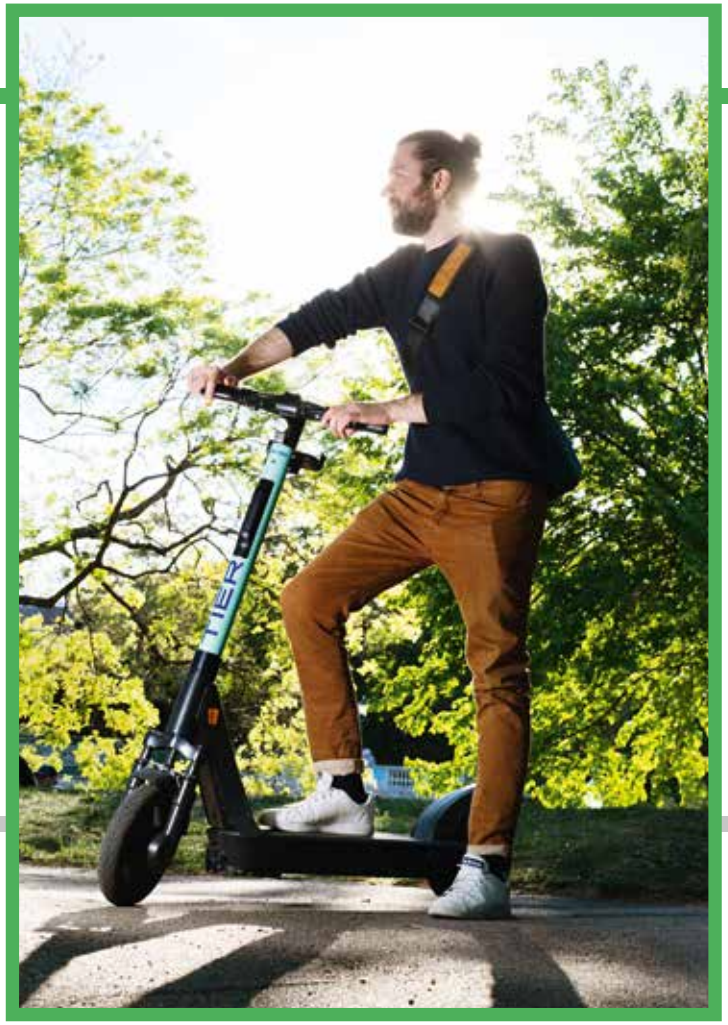
The WienMobil stations are interchanges where users switch from one mode of transport to another. In addition to opening up access to the public transport network, the city's residents can use them to book supplementary transport solutions such as car-sharing vehicles, e-scooters and Citybikes. This provides the ideal link between public transport and individual options for the 'last mile' between people's homes or places of work and the nearest bus or tram stop or station. As well as bicycle parking, the WienMobil stations also have designated zones where e-scooters can be left, and charging points for e-vehicles.

There are currently three WienMobil stations in Vienna: Rochusmarkt, Richard-Wagner-Platz and Simmering. Wiener Linien's goal is to set up at least 150 of these nodes over the next decade to ensure that no-one needs to be fully reliant on their private car in the city.

Pocket-sized transport solution

The WienMobil app is the digital counterpart of the WienMobil stations. Launched in summer 2017, the app has already been downloaded more than a million times. Through the WienMobil app, passengers have access to real-time information on arrivals and departures, Wiener Linien timetables,

> The number of annual season ticket holders rose by 3.7% in 2019 to 852.300.



Wiener Linien's WienMobil stations conveniently combine public transport with a broad range of services and sharing options.

digital tickets and live traffic updates. Numerous partners including Citybike, car sharing and scooter providers make it possible for users to plan routes the length and breadth of the city with a maximum of flexibility. You could say that the app puts numerous providers' service portfolios in passengers' pockets.

The WienMobil stations and the WienMobil app make an active contribution to reducing traffic in the city by encouraging users to leave their cars at home. In this way, the Group has succeeded in bridging the gap between the individual's need for convenience and the need to provide climate-neutral transport solutions. Public transport uses ten times less energy than cars, is quieter and is largely powered by electricity. Each year, people can help cut carbon emissions by up to 1.5 tonnes simply by taking public transport – and in many cases, it is quicker than travelling by car.

A new approach to transport

Upstream – next level mobility GmbH, a joint venture between Wiener Linien and Wiener Stadtwerke, is driving innovative transport solutions. Its agile team of young lateral thinkers has managed to intelligently link the different modes of transport and use the data at its disposal to optimise traffic flows. The next groundbreaking idea is currently in the test phase. Upstream's Culture Token pilot and research project actively rewards climate-friendly behaviour. Simply by opting to travel with sustainable modes of transport, users are awarded digital credits which can be redeemed at various cultural institutions such as museums and galleries. The system, which launched in test mode at the end of February, had to be put on hold due to the coronavirus outbreak.

"We need joined-up thinking when it comes to mobility"

Joined-up transport solutions

In addition to covering Vienna's public transport network, WienMobil extends to the following partner enterprises:

- Citybike Wien
- Europcar car rental
- Nextbike bike sharing
- ÖAMTC easy way e-moped sharing
- ÖBB Rail&Drive car sharing
- Share Now car sharing
- Sixt car rental
- Taxi 31300
- Taxi 40100
- TIER e-scooter sharing
- Westbahn
- Wipark
- Circ e-scooter
- car2go car sharing
- City Airport Train
- Vienna Airport Lines

The app lets users plan routes and book various transport solutions. It takes account of membership of car-sharing schemes and existing tickets for the public transport network. Routes are calculated for all modes of transport and payments for services are made to providers directly via the user's preferred payment method. The portfolio is being extended all the time.

WienMobil, Wiener Linien's mobility app, puts the whole city at your feet: purchase a ticket, reserve a car-sharing vehicle of your choice or book a taxi – all in a single app.

Interview with **Alexandra Reinagl,** General Manager at Wiener Linien, about the idea behind the mobility hub.

Can you explain the thinking behind the mobility hub in three sentences?

Alexandra Reinagl Of course! Our aim is to become a kind of Amazon for mobility services. Buses, trams and underground trains are the centrepiece, and they are linked to supplementary sharing services, both digitally via the app and offline at the WienMobil stations. So we're integrating the public transport network with personal mobility services.

How does the mobility hub benefit customers and what is Wiener Linien looking to achieve with it?

AR Public transport is becoming more and more important, especially in view of the climate crisis and the fact that the city is growing all the time. Whenever people use public transport, they're helping to protect the climate. So we need to make it as easy as possible for them to use the network. That is the real aim of the mobility hub – getting people smoothly and sustainably from A to B in a major city.

We are supporting the overriding 2050 target of the Smart City Wien strategy: maximising quality of life for the people of Vienna while also conserving resources as far as possible. Satisfaction with the public transport system is already very high. In Vienna, public transport accounts for 38% of the modal split, which shows the different forms of transport people use to get around. That is one of the highest levels anywhere in the world. Just to give you a comparison, the figure for Munich is 24% and for Hamburg 22%. But we want to keep on improving nevertheless.

So does that mean optimum integration of services is the key to success?

AR Exactly. We need to get rid of the silo mentality and adopt a joined-up approach to mobility. That's a leading priority for Wiener Linien. It has to be possible to move around the city quickly and sustainably. And we can guarantee that by combining our services with those of our mobility partners.

The WienMobil stations bundle public transport with Citybikes, car sharing and rental e-scooters. It's the ideal link between public transport and flexible, individual options for the 'last mile' between people's homes or places of work and the nearest public transport stop or station.

Passengers can choose from a wide range of different means of transport – no matter whether they need to transport something or just have to get somewhere quickly. Depending on the location, the stations offer a variety of services – from bike, e-scooter, car or moped sharing, a bike service point or e-vehicle charging station, to bike shelters, freight bicycles and taxis.

What role does digitalisation play in your thinking?

AR Just as with many other aspects of daily life, mobility doesn't play out exclusively in the bricks-and-mortar world. People always have their mobiles with them, so phones need to support our offering.

The combination of sharing, multimodal transport and digitalisation is the key to success. That's why we developed the WienMobil app. It opens up easy access for everyone, any time and anywhere. From smartphones, watches or desktops – whatever the type of mobility.

WienMobil simplifies routing and bookings for different forms of transport, and it takes membership of car-sharing programmes and public transport tickets into account. People can buy Wiener Linien tickets directly using the app, and the tickets are also displayed via the app. If you have an annual season ticket, you can upload it to the app and have it displayed on your phone.

> The WienMobil stations and our app enable us to integrate the public transport network with personal mobility services. ”

The safest option without a doubt

Safety is another factor in the success of public transport.

Every year, the average Austrian travels 3,500 kilometres on public transport – that's the distance between Vienna and Norway's North Cape. 90% of the capital's residents use public transport, two-thirds of them either every day or several times a week.

This readiness to use the network is very much a reflection of how safe people feel when they get on a tram, bus or underground train in the city. When it comes to passenger safety, both Wiener Linien and Wiener Lokalbahnen can fall back on a combination of modern infrastructure, well-trained staff and awareness-raising measures.

Safety equipment in the stations and on trains and buses is optimised on an ongoing basis, and more is being installed. For instance, passengers who use the emergency call stations on underground platforms are connected directly with the control room, and can tell the staff there to initiate an emergency stop or alert the emergency services. On the trains, passengers can talk directly to the driver via a call button located next to the doors.

Video surveillance is another integral part of modern safety infrastructure. More than 13,000 cameras are currently in operation – they monitor 85% of the underground trains, and also help to prevent incidents on station platforms. It's also worth mentioning that the data they collect is deleted after 48 hours. Recordings are only passed on if the police ask to see them during this time.

But Wiener Linien is not only on the top of the game technologically: The company has built up a team of more than 300 safety and service personnel over the last few years. They are on hand to make sure that people stick to the rules, to provide information on safety facilities, and they are also trained to de-escalate tense situations and administer first aid.

The most effective measures are those taken well before an emergency situation even arises. This is why significant amounts have been spent on prevention

Safety equipment has been installed throughout the Wiener Linien network to ensure the safety of both passengers and employees.

Prevention and raising awareness are just as important as arriving on the scene quickly in the event of an emergency.

Safety at WIPARK car parks and the ease with which users can navigate the facilities are regularly assessed.

and raising awareness – starting with the youngest members of the community. Wiener Linien prevention teams regularly supply schools with information packs on the topic of safety and rail transport, and point out key factors when it comes to using public transport safely.

Attention-grabbing advertising campaigns also have a preventive effect. Wiener Lokalbahnen's 'Gib Acht bevor es kracht' slogan was designed to focus attention on the safe use of level crossings. It targeted both Lokalbahnen passengers as well as other road users.

Wiener Linien's latest campaign is titled "Im Zweifelsfall ist es ein Notfall" – it uses a range of methods, from ground markings on platforms to interactive video clips, to show people how to respond in critical situations. Often, public transport users can find it difficult to react appropriately to an incident. What should you do if you see an argument that is about to turn ugly at a train station? Or what if someone suddenly collapses somewhere on the underground?

In case of doubt, it's an emergency – and beyond a doubt there is sufficient safety equipment in place on the public transport network to enable people to react quickly and appropriately when confronted with situations like these.

WIPARK: Security cameras as digital parking inspectors

WIPARK is also turning to digitalisation, in the shape of automated outdoor surveillance. This is used if car parks cannot be equipped with the usual barriers and pay stations. They usually have ticket machines where customers can pay the parking fee. But this solution cannot provide live data on car park occupancy.

A pilot project centred on intelligent camera technology is set to provide the answer. Visual data removes the need for time-consuming manual checking of tickets, and digital analysis can be used to assess how full a car park is at a given time. The trial will also look at the question of whether this technology can be used to provide simplified payment methods to regular customers. Entry and exit, and fee charging would simply be handled with the help of number plate recognition. WIPARK regularly uses 'mystery parking' surveys to find out how good its services and those of its competitors are. The new WIPARK sites on Geblergasse, Karree Breitensee and Missindorfstrasse scored particularly highly in the surveys, receiving top marks in the building and orientation categories, and above all in terms of safety.

Opening up new

Earthworks, drilling, excavating and concreting are in full swing. The access trench on Matzleinsdorfer Platz – where work for the new U2 has already begun – has taken on vast dimensions. It is really deep, at around ten metres. "And we're not even half way," explains Manfred, one of the construction workers who is cutting steel mesh with his angle grinder. "By the end of the year we'll have reached a depth of 30 metres!"

w routes

A3

INTELLIGENT NETWORKING OF THE SERVICE PORTFOLIO

Profit for the year from continuing operations

→ See page 13 for details

B2

INVESTMENT IN OPENING UP NEW ROUTES

Transport – investment

→ See page 14 for details

Wiener Linien plans to invest about EUR 386 million in 2020.

Elterleinplatz
From Elterleinplatz to Karlsplatz in ten minutes

U5

Michelbeuern AKH

Arne-Karlsson-Park
Change to tram lines 5, 33, 37, 38, 40, 41 and 42

Frankhplatz

Rathaus

U2 U5

U2 U3

U5

Neubaugasse
From Neubaugasse to Schottentor in three minutes

Pilgramgasse

U2 U4

Reinprechtsdorfer Straße
The fifth district's first-ever underground station

Matzleinsdorfer Platz

U2

Gußriegelstraße

U2

Wienerberg
Links to the city centre for new urban developments in the south

Phase 2

The U2 and U5 expansion project will add nine kilometres and 11 new stations to the network.

Almost 60,000 cubic metres of earth is being excavated for this shaft alone at the new Matzleinsdorfer Platz U2 station. As soon as the shells of the other stations are also in place, a tunnel boring machine known as a mole will be assembled 30 metres below the surface. It will take half a year before the up to 80-metre-long and seven-metre-high machine is ready to start digging. Then the mole will get to work excavating a tunnel from Matzleinsdorfer Platz in the direction of the seventh district, installing the tunnel walls as it goes – at a speed of 12 metres a day.

But all that hard work will pay off: in 2027 Matzleinsdorfer Platz will become fully operational as a quick and essential interchange on the public transport network. Passengers arriving here can reach Rathaus in under ten minutes on the U2. The construction site is one of the more visible parts of the ongoing expansion, and renewal of the public transport network is a key element of the huge U2xU5 project. The new U5 underground line between Karlsplatz and Frankhplatz will enter into service in 2025. Construction of the new section of the U2 to Matzleinsdorfer Platz will be completed around two years after that.

The intersection of the U2 and U5 underground lines is actually the city's biggest climate protection project. The U2 will extend southwards from Schottentor along a completely new route. The intersection links it to the U5, creating a new transport node in the heart of the city. Hub stations like this make the public transport network even more efficient and convenient to use by cutting distances between destinations and opening up more direct connections. Today, there are ten such hubs on Vienna's public transport network, with the new route adding a further four, as well as a new interchange for the S-Bahn rapid transit system.

Constructing the new U5 and rerouting the U2 isn't just a challenge from an urban planning and logistical point of view; it also has a major economic impact. Investment in the U2/U5 intersection project will create and secure around 30,000 jobs. And every euro invested in expanding and upgrading Vienna's outstanding and attractive public transport network makes an active contribution to protecting the environment.

2020 sees the start of preliminary work at all the other stations on the U2xU5 intersection (first phase). This includes rerouting underground pipes and cables, relaying road surfaces and reinforcing buildings. From autumn 2020, the 13A bus will travel in both directions along the traffic-calmed, pedestrian-friendly zone on Neubaugasse. Following the move, Vienna's busiest bus route will be even better connected to the underground network and serve three new stations.

> With new direct connections being added all the time, the underground system is the city's eco-friendly lifeblood.

Investment in the tram and bus network over the past three years amounted to EUR 70m. And there is more in store for the year ahead: the route of the O tram will be extended by 1.4km from Praterstern to incorporate a further four stops, which will improve connections to the Nordbahnhof urban development zone. Construction work is due to start in the spring so that the O tram is ready to enter into service on its newly extended route in time for the inauguration of the new school campus in autumn 2020.

In short, there is a lot happening on Vienna's public transport network. Standing still is not an option for a modern city with a population approaching two million that is looking to hit its environmental targets. Each additional kilometre added to the public transport network is an investment that will bear fruit for decades to come.

Wiener Linien – Greener Linien

Vienna is a special city in many different ways.

One aspect that there are more annual season ticket holders for the public transport network than there are official car registrations in the city. In 2019 the number of holders of an annual pass rose by a further 30,000, to 852,000.

In light of this fact you could say with a clear conscience that it represents a more-than-satisfactory contribution to environmental protection and sustainability. Whats more: as Wiener Stadtwerke is set to invest an additional EUR 368m in expanding the existing network and other important environmental measures in 2020. After the year of the tram, 2020 will be the year of the eco-bus.

With 414 environmentally-friendly Euro 6 buses and 14 e-buses in service, the city has already made considerable energy savings in this area. At present, a dedicated competence centre for e-buses is taking shape in the Siebenhirten area of the city, ready for an additional 60 electric buses to join the fleet in 2023. In addition, trials of the first hydrogen-powered bus will get underway in June 2020. The development of bio-fuels is another focus to help make combustion engines even more climate-friendly. This will involve the use of waste products such as sewage sludge to produce alternative sources of energy which can be used to partially fuel the bus fleet. A development project looking at ways to achieve this is currently up and running.

The Wiener Linien electric buses have zero local emissions.

In addition to investment in infrastructure designed to cut carbon emissions, greening initiatives and planting schemes are also making an active contribution to climate protection. This involves greening tram and bus shelters and introducing green track beds on the routes of the O and D trams.

Wiener Stadtwerke presented the idea of the Stadtwerke Forest to coincide with its 70th jubilee. One tree will be planted for each of the 200 jubilee attendees, sending a clear statement in support of the Group's numerous climate protection initiatives. The first 60 trees can already be seen at Stammersdorf cemetery. Over the course of this year, a further 140 trees will be planted at various locations in the city, including 60 at Wiener Linien's Erdberg HQ. The Stadtwerke Forest is one of the first projects backed by the Wiener Stadtwerke climate fund.

Climate fund

The new Wiener Stadtwerke climate fund is designed to support smaller initiatives, as well as the Group's major climate protection investments. It is endowed with EUR 500,000. Wiener Stadtwerke employees are invited to submit their project ideas, with funding of up to EUR 50,000 available to successful submissions.

Wiener Stadtwerke invested a total of EUR 641.9m in the expansion of the public transport network in 2019.

Art is part of our city. Since 1991, Wiener Linien has overseen the installation of more than 30 historic artefacts and contemporary artworks at the 100-plus underground stations that make up the network. On show around the clock, they can be enjoyed at any time with a valid ticket.

What else we are investing in.

Besides the U2xU5 intersection, Wiener Linien and Wiener Lokalbahnen are constantly investing in ways to make public transport even faster, more convenient and environmentally friendly. Here is a snapshot of just a few of the latest projects – but by no means the complete picture.

NEU4

The extensive NEU4 upgrade is the biggest modernisation scheme in the history of the Vienna underground. Between 2014 and 2024 a total of EUR 377 million will be invested in signalling control centres, tracks, track beds, stations and tunnel roofs. Since work started in 2019, there have been virtually no interruptions to normal service despite the scale of construction work.

Air conditioning for the U6

Launched in 2019, the project to retrofit trains on the U6 is timed to ensure that all passengers using the line will travel in air-conditioned rolling stock in time for summer 2020. 39% of trams, half of the underground trains and all buses are air conditioned.

Accessibility

A total of 270 lifts are in operation at 109 underground stations to ensure accessibility. In 2020, ten lifts at six stations were modernised to further enhance attractiveness for public transport users.

Even more investment projects

- Installing photovoltaic arrays on the roof of the Ottakring underground station, reducing CO_2 emissions by 21 tonnes
- Taking delivery of the prototype self-driving X-Wagen train for the Vienna underground in 2020
- Procuring new Flexity trams

Total revenue reported by the Transport Division advanced from EUR 686.5m in 2018 to EUR 710.6m in 2019.

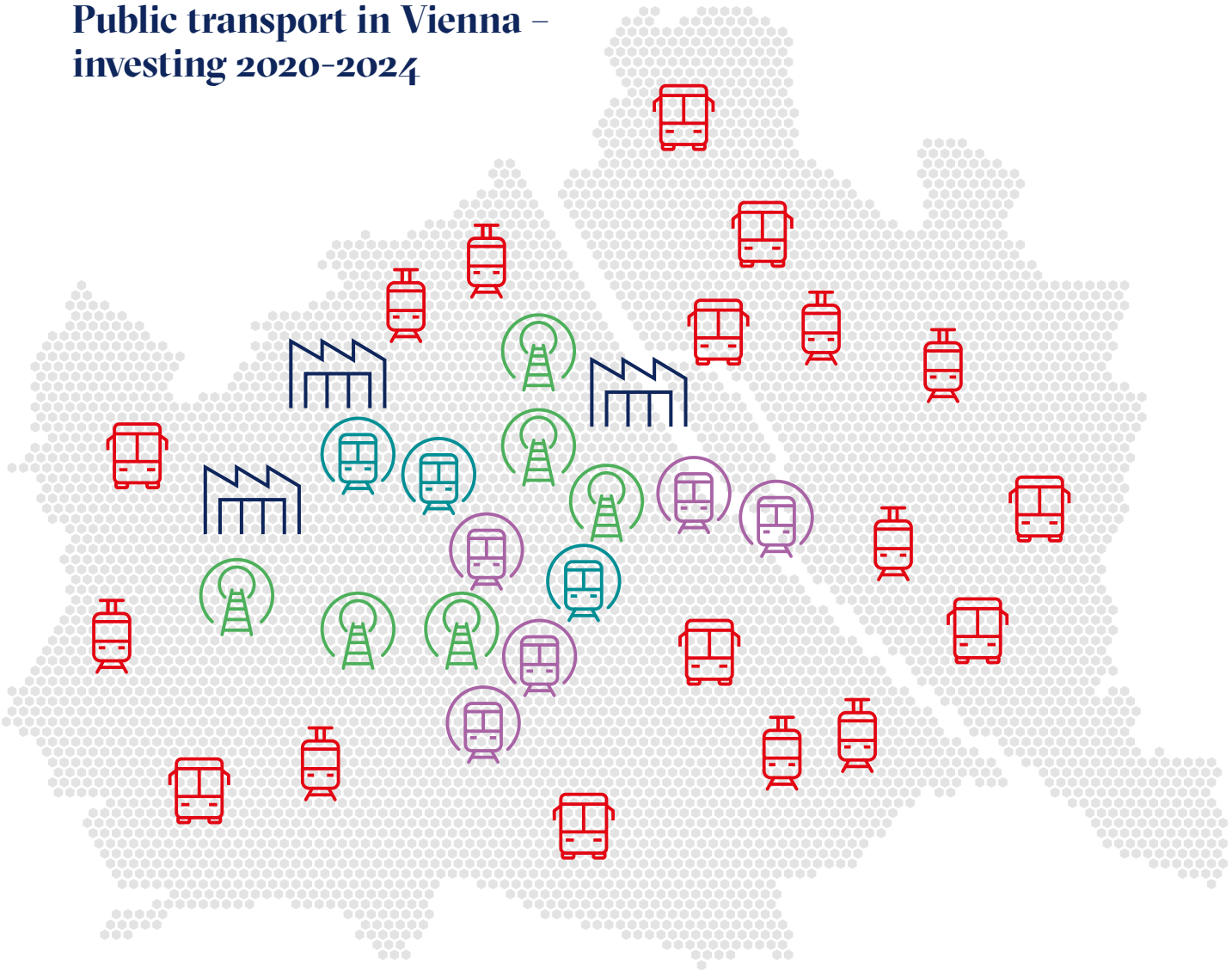
Expanding the tram and bus network

In all, the City of Vienna and Wiener Linien have earmarked total spending of EUR 70m on extending and speeding up the tram and bus network between 2017 and the end of 2020. To help optimise links between public and personal transport and on the 'final mile' between home and the office, additional WienMobil stations will be opened in 2020. Wiener Lokalbahnen is also combining transport solutions with practical services at its easymobil stations, where customers can collect parcels or make use of car- and bike-sharing schemes.

In December 2019 Badner Bahn and Verkehrsverbund Ost-Region (Eastern Region Transport Association, VOR) concluded a 15-year service agreement to extend the scope of Wiener Lokalbahnen's operations. It paves the way for more services in future, as well as the procurement of a new, state-of-the-art fleet. In all, the contract is worth around EUR 700 million. From the end of 2020, passengers can look forward to additional capacity of around 350,000 timetabled train kilometres.

Green track beds in the Sonnwendviertel

Public transport in Vienna – investing 2020–2024



U2xU5
Construction of the U5 and extension of the U2:
Competitions in running

U4 NEU
Modernisation work:
EUR 152m

Procurement
of new underground trains, trams and buses:
EUR 445m

Depots 2.0
Completion of the Brigittenau, Ottakring and Hernals depots:
EUR 77m

Energy is more than just electricity.

Deputy Chief Executive Peter Weinelt on Wiener Stadtwerke's energy strategy – and the ultimate goal of powering every household in Vienna with renewable electricity. Energy teamwork is the order of the day.

VIENNA IS THE GREENEST CITY IN THE WORLD – more than 100 cities worldwide were surveyed for the Greenest Cities ranking, which compared various criteria such as parks and green spaces, use of renewable energy sources, air quality, pedestrianisation, markets with local products, and public transport.

Vienna was named the Greenest City in the World in a recently published survey. A city of almost two million people, which your company supplies with energy. Isn't that a great feeling?

Peter Weinelt The great feeling comes when everything is running as it should. After all, the energy market is more than just a market. We want to go beyond our core objective of ensuring a secure and reliable supply of energy. Our ambition is to significantly expand environmentally-friendly power generation. This brings challenges that we are ready to face.

You raise the topic of renewables. What will Wiener Stadtwerke do to help us move towards the goal of creating a carbon-neutral economy?

PW The ultimate goal is to power every household in Vienna with electricity from renewable sources. Two aspects will play a major role in achieving this. Firstly, maximum-efficiency sector coupling. This means ensuring that the form of energy required is supplied at the right time, in the right quantity, in the right place. Do we only need electricity generated by wind turbines when it is windy? No. So we have to think about which other forms of energy we can convert the electricity we generate into, potentially gas in winter and district cooling in summer. Energy teamwork is

the order of the day, and this is an area where we play a pioneering role.
And secondly, you have to invest in environmentally-friendly energy. In the solar power sector alone, areas the size of 600 football pitches will be covered by photovoltaic arrays by 2030. We are also offering energy management consultancy services for both private and commercial customers. We look at areas where energy and heat consumption can be optimised. After all, this knowledge will help customers to conserve energy and, as a result, save money. But we are also looking at where we ourselves can make improvements. Sector coupling is the watchword here.

Can you explain what is meant by sector coupling?

PW People don't just need electricity, but gas, district heating and district cooling, too. And demand fluctuates – in summer we need less heat. So we convert these forms of energy into the ones that are needed at the time, such as district cooling. In simple terms, that is essentially what is meant by sector coupling. The different forms of energy work together as a team. What do I do with excess solar energy that I produce during the day but need at night? I can convert it into gas, which can then be turned back into electricity when it is needed. Electricity, heating, gas – all conceivable forms of energy working together as a team. What form of energy can I efficiently convert into another? How can I store the power generated by renewables to use when I need it? These are the questions that we are focusing on in sector coupling, and we are finding the answers. We are already using combined heat and power, and have one of the most technologically advanced thermal power stations in the world, which converts gas into electricity very efficiently.

When people think about security of supply, their minds usually turn to electricity, but consumers also need reliable access to other types of energy. What are the challenges Wiener Stadtwerke is facing?

PW Energy is more than just electricity. Many people in Vienna heat their homes and cook with natural gas. So we ensure there is a reliable gas supply network, keeping around 4,700km of pipes in working order. Laid down end to end, the pipeline could carry gas all the way to China. This network has to be maintained, and supply the areas where gas is needed. District heating is a major topic in Vienna. The Spittelau district heating plant incinerates around 250,000 tonnes of household waste each

Deputy Chief Executive Officer
Peter Weinelt

year and heats around 60,000 households. We want things to stay that way, which is why we are continuing to invest in it.

In photovoltaics, you are pursuing citizen-backed models. What do they look like in practice and what are your experiences of them?

PW We construct, operate and plan PV sites in Vienna and the surrounding area. Our experiences have been fantastic, more than 10,000 citizens have registered with us and 27 citizens' solar power plants have already been installed. We also constructed four wind turbines under the same model, and have cut carbon emissions by 40,000 tonnes so far. At the same time, it raises awareness among the citizens who participate in the scheme. They get a feel for what can be achieved with renewable energy.

> We supply energy to more than two million people, around 230,000 businesses and public buildings and around 4,500 agricultural enterprises.

If energy is no longer produced in a handful of larger power stations, but in numerous smaller facilities instead, such as wind, photovoltaic and biomass plants, energy management and infrastructure also have to be adapted. And in this context we often hear people talking about smart grids. Can you explain what that is?

PW In future, power will no longer be generated at large power stations. Instead, many consumers will have their own 'power station' at home, in their community or at their place of work. Electricity production is becoming more interactive. If someone decides to install a PV array on their roof, that's all well and good, but it will not necessarily produce electricity when it is actually needed. If I go to the office during the day I need electricity there, and at home in the evening. So it makes sense to put the electricity generated at home to use elsewhere and then to have it supplied to my home in the evenings. In principle, that is the idea behind a smart grid: decentralised energy production facilities which are all interlinked and 'think for themselves', so that supply is directed to where it is actually needed. This makes using renewable energy more efficient.

What is the significance of digitalisation for the energy sector?

PW At the moment, Austrian households are switching over to smart meters. There are various advantages to this. Firstly, no-one has to be physically present to read the meter, which is more convenient for customers. Secondly, the data supplied by the smart meters permit us to make very accurate forecasts. This means that we know what kind of energy will be needed where in future, and how much. Then we know where we need to install and expand networks.

You've mentioned lots of goals and challenges: security of supply, affordability, competitiveness and climate neutrality. How would you rank them, what are your priorities?

PW These topics are all so closely related that it's impossible to separate them. Everything has to be taken care of at the same time, and that is exactly what we do.

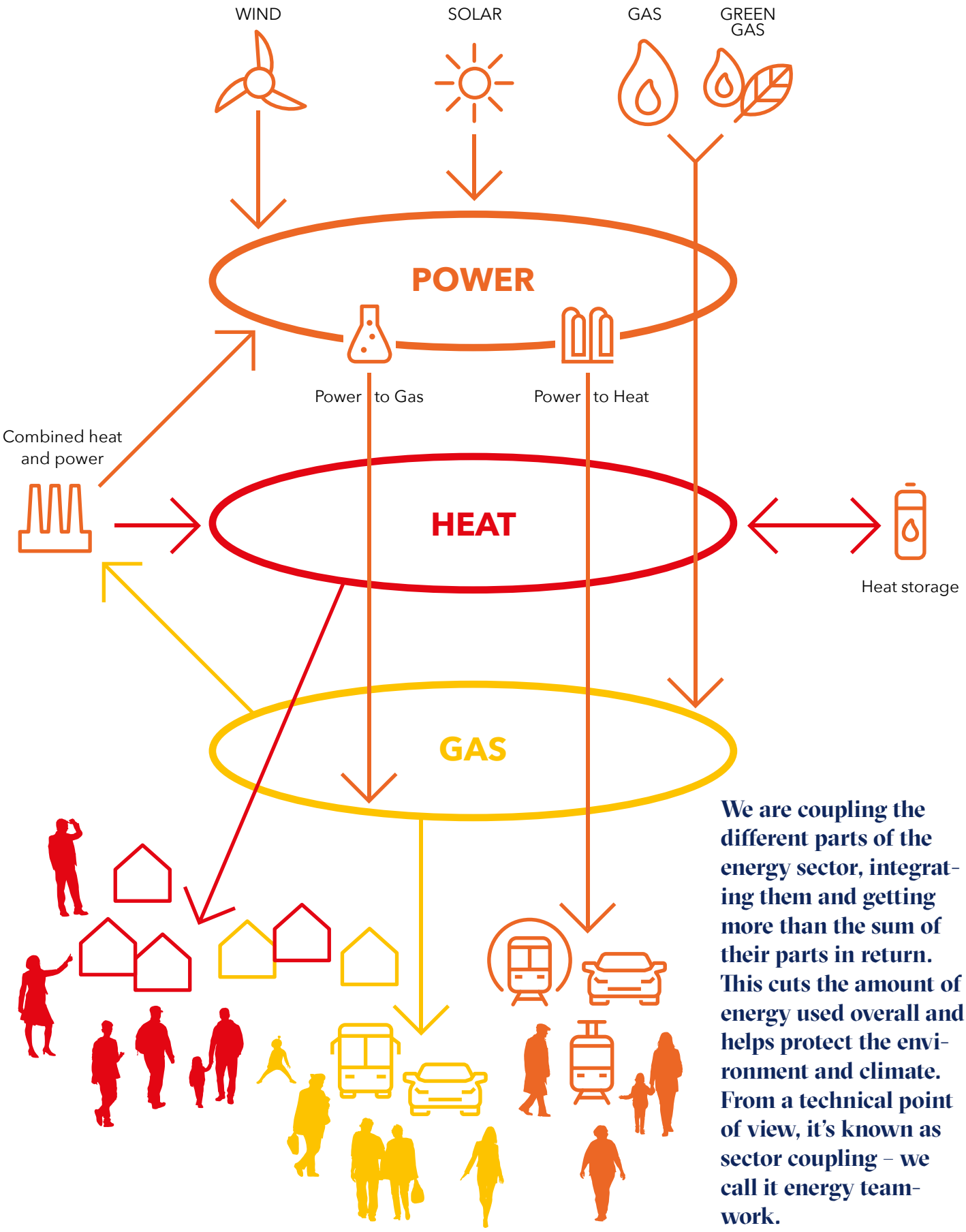
We call it energy

teamwork

When the sum of different parts achieves more than the individual components would otherwise be capable of, it is a classic example of successful teamwork at play. This not only applies to sport, but many other areas of life too– including energy production and consumption. And even though the two terms are often used interchangeably, there's more to energy than just electricity. People work better in a team, and the same goes for the different forms of energy that work efficiently together.

A1
SECTOR COUPLING

Energy and Energy Grids – property, plant and equipment
→ See page 12 for details



We are coupling the different parts of the energy sector, integrating them and getting more than the sum of their parts in return. This cuts the amount of energy used overall and helps protect the environment and climate. From a technical point of view, it's known as sector coupling – we call it energy teamwork.

In the past, the electricity, heating and transport sectors have largely been seen as independent of one another. But the climate crisis is calling on us to rethink conventional forms of power generation and questions surrounding energy efficiency. Energy has to bridge the gap between the different sectors as part of a team where, to pick a random example, waste heat cannot be allowed to escape up the chimney but should be put to use elsewhere.

A simple illustration: anyone who is hidebound by old ways of thinking might say that as the sun is out during the day but more energy is needed during the evening, solar power is inefficient. But a team player might ask how the surplus energy on sunny days can be put to good use – and come up with a viable solution.

Anyone who looks at the bigger picture and from one sector into another will soon start coming up with ideas: the energy can be used to heat water, which in turn generates heat for use in district heating. It could be used to produce hydrogen or gas, which can power cars, turbines and public transport in a process the experts call power to heat or power to gas.

Team players are rated very highly at Wiener Stadtwerke. To help us provide climate-neutral energy, the entire system needs a root-and-branch overhaul. And this is where teamwork is both a challenge and an opportunity. We love this city, and want to make sure it remains liveable in future.

We are coupling the different parts of the energy sector, integrating them and getting more than the sum of their parts in return. This cuts the amount of energy used overall and protects the environment and climate. From a technical point of view, it's known as sector coupling – we call it energy teamwork.

"Sector coupling is Group-wide"

Interview on sector coupling with

Gerhard Fiegel,

Office of the Deputy Chief Executive Officer, Energy, HR and IT

Sector coupling is on everyone's lips. But what is it?

Gerhard Fiegel 63% of the electricity consumed in Vienna is from renewable sources. For heat and mobility this proportion is much lower.

These two areas have a lot of ground to make up in terms of reducing carbon emissions, even though they consume much more energy. One of the reasons behind this is that the individual sectors are pushing up against their limits. There are many methods of renewable electricity production, but hardly any ways to store the energy produced. And as far as heating goes, we have a gas network which is incredibly well suited to storing very large amounts of energy for longer periods. But it is another sector. The solution would be to link these sectors effectively so that they can support one another. And this type of link is just one of numerous potential ways that the electricity, heating and transport sectors can be integrated with each other.

What role does Wiener Stadtwerke play in this area?

GF For a long time, we've focused on combined heat and power generation. That means we convert forms of energy: Gas and waste into electricity and heat. For a number of years we have been working on expanding what we refer to as the "Vienna model". This involves operating a large heat pump which generates electricity from the waste heat from a power station. Waste heat from the sewerage system is also injected into the heating network.

We also work according to the principle of waste to value, which quite literally transforms waste into something valuable. One example of this in action would be using sewage sludge to produce synthetic gas or synthetic liquid fuel. We are expanding our expertise all the time in pilot plants. At the same time, we are working on the use of geothermal energy, and starting tests of hydrogen-powered buses. The hydrogen needed will ultimately be produced

using surplus energy from renewable sources. In e-mobility we have a flywheel generator for faster charging of e-vehicles in operation alongside numerous conventional e-charging points. This brings rapid charging from rotational energy into the mix.

That all sounds very tangible. Are the conditions for real-life implementation already in place?

GF Implementing sector coupling to achieve CO_2 reductions is critical, particularly in cities, as conurbations are responsible for a significant proportion of carbon emissions. Wiener Stadtwerke is predestined for the role of implementer here in Austria's largest city.

There are four aspects behind the feasibility of the various aspects: technical, commercial, legal and strategic.

From a technical perspective, it's clear that a high degree of digitalisation is the fundamental requirement. Only then will it be possible to link plants from the various areas. Close collaboration between researchers in the individual technical fields is also needed.

And then each of these technologies has to be financially viable. We are working hard on new business models that can also be put into practice. But – and this is where the legal side of things enters the picture – current legislation is structured in such a way that the commercial value of sector coupling cannot yet be properly determined. The different blocks that we have – transport, gas and electricity – are subject to different areas of the law. So we have sectors working together that are still not able to do so from a legal point of view. The goal is to create a level playing field, meaning that all players have access to the same market opportunities.

And finally, anything that we do has to fit in with our strategy. At present, two major topics are under consideration: under our hydrogen strategy we are looking at the contribution Wiener Stadtwerke companies can offer in the overall value chain. What's important is that the hydrogen is generated using green electricity, otherwise the chain would cease to make sense. And then there is our transport strategy – here, we are investigating which transport solutions Wiener Stadtwerke can also offer. For both of these thrusts, the goal is for Wiener Stadtwerke to achieve a whole that is greater than the sum of its parts.

So does this mean that all of the companies in the Wiener Stadtwerke Group will be coupled?

GF Exactly, we can see from the example of sector coupling how we cooperate efficiently within the Group. Personally, I am particularly pleased about this cooperation towards a common goal.

> We look at the big picture when it comes to efficient and sustainable energy use.

The Simmering power station is one of the most advanced and environmentally friendly plants in Europe.

Energy teamwork

Renewable

Climate protection is one of the biggest challenges of our time. At the EU level there are minimum targets for reducing greenhouse gases (by 40%) and increasing the proportion of demand covered by renewables (by 32%) by 2030. In this respect, big cities such as Vienna that can make the greatest contribution, as the majority of CO_2 emissions are generated in major urban centres. As a result, Wiener Stadtwerke will have a central role to play in reaching the national climate targets for the electricity, heat and transport sectors.

B1

EXPANSION AND DEVELOPMENT OF RENEWABLE ENERGY

Investment in energy and energy grids

→ See page 14 for details

energy

A lot has happened in recent years: per capita greenhouse gas emissions have dropped by 33% in Vienna since 1990. And at the same time, the share of renewables continues to rise. To help hit the EU targets, Wien Energie is investing in expanding renewable generation.

Key steps along the way to decarbonising Vienna include the installation of photovoltaic systems on a total area equivalent to 600 football fields, as well as the construction of Europe's largest heat pump in the district of Simmering – the latter will supply 106,000 households in the city with eco-friendly heat. In addition, the public transport network is being extended, and there is also a drive to promote zero waste and utilise combustion residue. Over the next few years, the addition of 16 hectares of new green spaces and numerous cooling measures designed to combat urban heat islands will form an important part of Vienna's climate change response.

Using public transport protects the climate

To ensure that tomorrow's transport solutions are sustainable, there needs to be a fundamental shift away from private motor vehicle traffic towards increased use of public transport, as well as walking and cycling. Every euro spent on public transport is also an investment in urban transport and climate protection. Today, the Wiener Linien network helps stop a million tonnes of CO_2 from escaping into the atmosphere each year.

There are also plans to move over to electric-only cars and light commercial vehicles by 2050, using electricity provided by Wien Energie. Construction of 1,000 public charging points by 2020 will ensure blanket coverage for the city. Once this project is completed, a charging point will never be further than 400 metres away in the metropolitan area. By 2023, Wiener Linien will have a total of 60 e-buses in operation. Trials of hydrogen-powered buses began in 2019.

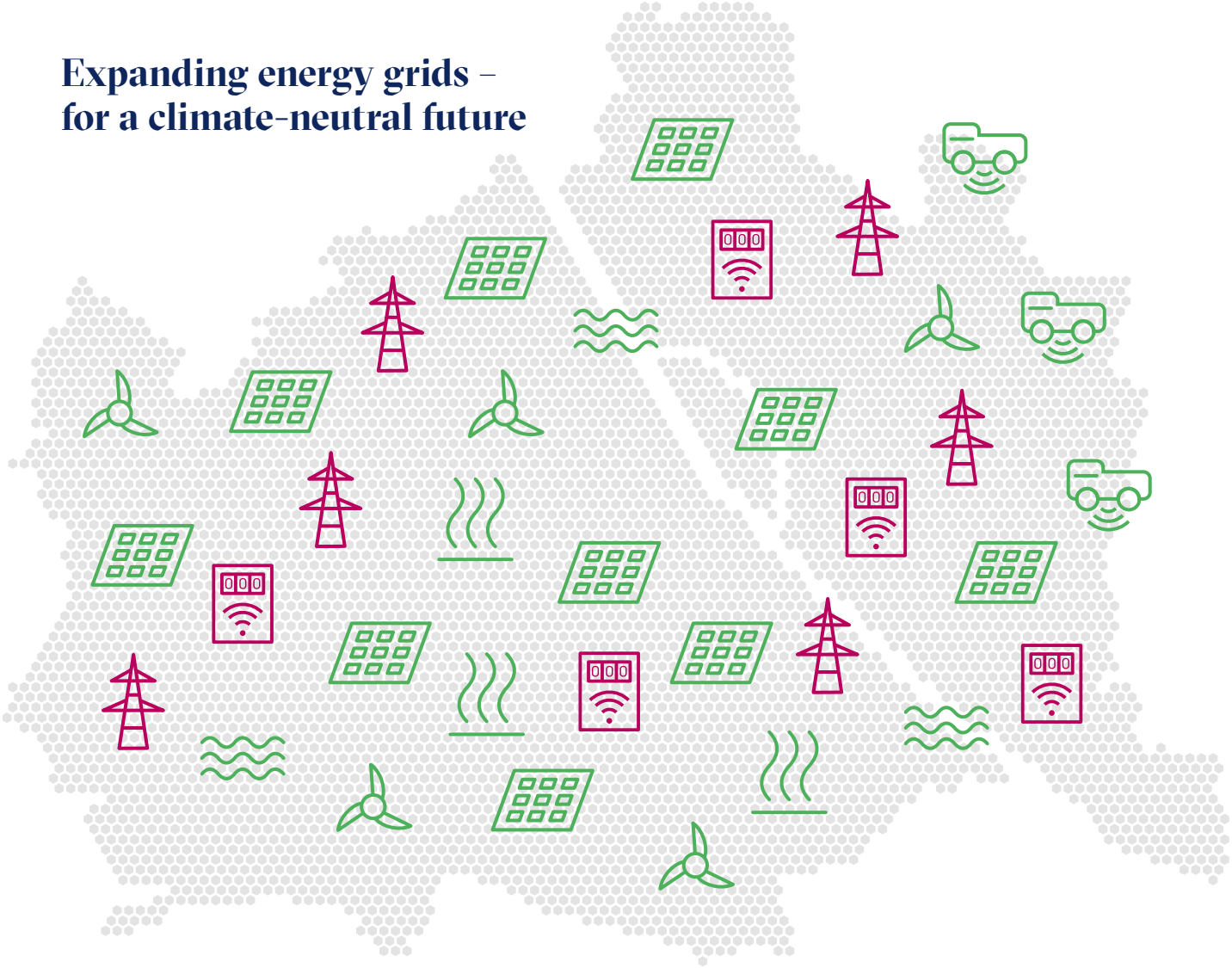
Wiener Stadtwerke is fully aware of the pivotal role it has to play in reaching the city's climate targets. Decarbonisation is our new core competence.

> Thanks to its innovations and investments in renewable energy, Wien Energie currently reduces carbon emissions by about three million tonnes a year.

Rating agencies underscore our efforts

The ratings awarded to Wien Energie by international rating agencies Fitch and Standard & Poor's show that the Group's decarbonisation drive is also attracting attention on the international stage. Austria's largest energy supplier, with almost two million customers, was awarded an AA-rating by the analysts at Fitch. Among the reasons behind its decision were Wien Energie's competitiveness, strong financial position and extensive investment in renewable energy. The A rating from Standard & Poor's also sends out a clear signal. The financial market experts from both rating agencies were won over by the company's highly diversified and strong standing in Vienna's electricity, gas and heating market, its own generating capacity and its stable structure backed by Wiener Stadtwerke and the City of Vienna.

Expanding energy grids – for a climate-neutral future



Scheduled investment in energy, 2020–2024: EUR 2.4bn

Smart meters: EUR 286m

Power line construction: EUR 273m

Wind: EUR 134m

Solar: EUR 134m

Waste heat: EUR 115m

Renewable energy: EUR 531m

Geothermal: EUR 55m

Hydro: EUR 93m

Solar drive for Vienna

More than 14,000 households are currently powered by solar energy.

The sun produces 970 billion kilowatt hours of energy every day. Just three hours is enough to cover the energy demands of the entire planet for a full year. And photovoltaic systems can harness the sun's energy. Wiener Stadtwerke is leading the way towards a carbon-neutral future for the energy sector with its use of solar power: the Group is the largest photovoltaic operator in the country.

> The expansion of photovoltaics and e-mobility continues to gather pace.

With a total installed capacity of more than 33 megawatts (MW), Wien Energie supplies over 14,000 households with solar-generated electricity. In 2019 it accelerated expansion of its PV segment with the installation of more than 50 new arrays, which saw solar output jump by 23.3% year on year. This pace is set to continue over the coming decade, with PV capacity due to reach 600 MW by 2030.

This is also a necessary step to help Austria hit its climate target of sourcing 100% of its electricity from renewables by 2030.

Technology, e-mobility and the law

In this respect, technological breakthroughs are particularly useful. The solar array on the roof of the Haus des Meeres – Aqua Terra Zoo in Vienna entered into operation in March 2020 and featured bifacial (i.e. two-sided) solar modules for the first time. This technology means that the system can also make use of indirect sunlight from the surrounding area. Another eye-catching example of technological developments came with the commissioning of an agricultural PV system – the nation's first – in Guntramsdorf in the late autumn. Vertically-mounted, raised modules mean agricultural land can serve a dual purpose and be used around 60% more efficiently. This delivers enormous synergies for the farming and energy sectors. And finally, flexible foil modules are being trialled at the Ottakring underground station.

From a legal perspective, the 2017 Green Electricity (Amendment) Act had huge significance for expanding renewables, particularly in the city, as it opens the door to the construction of communal generating plants on top of apartment buildings and office blocks. The first communal plant entered into service in the 22nd district in autumn 2018 and now supplies solar power to 48 households. A further six such plants will follow in Vienna and Lower Austria in the first half of 2020.

Photovoltaic generation is also increasingly important in terms of expansion of the e-mobility sector. Electric vehicles only make sense if the energy used to run them is sustainably produced. Solar is the energy source of choice and Wiener Stadtwerke is making substantial investments in expanding its e-charging infrastructure – a total of 1,000 charging points in all 23 districts. Wien Energie is testing new flywheel energy storage technology to ensure rapid charging times. It works by using an innovative process to buffer output through kinetic energy. While the capacity of charging points is currently limited to 40 kW, this technology has the potential to fully recharge vehicle batteries in just 20 minutes using 100 kW. And as only green electricity is used, Vienna really is on the road to a bright future.

The new solar array on the roof of the Haus des Meeres – Aqua Terra Zoo comprises 202 special bifacial glass/glass photovoltaic modules to generate electricity from below as well as above.

> In 2019 wind power output was up 17.9% on the previous year.

Hydro and wind pioneers

Hydro power production increased from 701.5 GWh to 766.8 GWh in 2019.

When people think about energy supply, and wind and hydro generation in particular, their thoughts are more likely to turn to the open countryside than the big city. But Vienna is something of an exception in this respect. Several small-scale hydro plants were built in Vienna as long ago as 1912-1914. And more than 20 years ago, Wiener Stadtwerke installed one of the first wind farms in Austria, on the Danube Island. Built at around the same time, the Freudenau hydro-electric power station became the world's first large run-of-river power plant in a major city when it opened in 1998. So large in fact that it supplies around half of all the city's households with green electricity.

Wien Energie operates a total of five wind farms within the city limits. The initial project on the Danube Island has since been joined by a further four generation facilities at Windpark Unterlaa. Together, the five sites provide wind power to 2,000 households. In 2019 wind-powered electricity generation was up 17.9% on the previous year.

Outside Vienna, there are six more wind parks in the Wiener Stadtwerke portfolio, including one in Pottendorf in Lower Austria. Comprising 15 turbines, it has a total installed capacity of 42.9 MW. In all, EUR 66m was invested in the facility, which delivers carbon emission savings of 52,800 tonnes a year.

Hydro responsible for one third of renewable energy

Wind accounts for a little over 5% of all renewable energy generated in Austria. At around a third of the total, hydro power's share is significantly higher. Electricity generated from water is clean and 100% CO_2-free. Hydro power is not only suitable for large pumped storage and run-of-river power stations, but is also a viable option for smaller-scale plants.

Wien Energie operates a host of small and medium-sized hydroelectric stations in Austria and abroad, including the facility at Hausmening an der Ybbs, which generates 13,000 megawatt hours of electricity each year and has a long-term supply contract with the Mondi paper mill in Neusiedl.

The small hydro power plant on the Danube Island is small but highly efficient. Designed as a screw turbine, the plant is integrated into the existing weir structure and makes use of the

Vienna's largest photovoltaic park in Unterlaa: 6,400 modules covering 28,000 square metres.

different elevations of the Danube and the Neue Donau. Due to its compact dimensions, it has only a minimal impact on the river's ecosystems.

The latest expansion projects include the Gulling hydroelectric power station at Aigen in the Ennstal valley, which Wien Energie commissioned in September 2019. Since then, it has been providing green energy to 5,000 households in the area, saving 13,000 tonnes of CO_2 in the process.

These power stations all make a crucial contribution to climate protection and represent only the tip of the iceberg in terms of things to come. Over the course of the next five years, Wiener Stadtwerke will invest half a billion euros expanding its renewable energy solutions.

> A total of half a billion euros has been earmarked for investment in renewable energy in the period to 2024.

Attractive terms for power station investments

Expanding green electricity production comes at a substantial cost, which is why Wiener Stadtwerke has developed a citizen-based model to encourage members of the public to invest in photovoltaic plants and wind farms. Similarly to crowdfunding, people make a contribution to the building costs. The benefits are twofold: firstly, there are the environmental rewards from building sustainable energy generating plants, and secondly, the investment delivers excellent returns.

A number of successful solar projects were implemented at the launch of the citizen participation model. To date, well over 10,000 people have together invested a total of more than EUR 35m in 27 solar power stations, helping to reduce CO_2 emissions. The concept was subsequently expanded to include wind power. In 2015, stakes in the two wind turbines in Pottendorf sold out in no time at all. Interests in another two facilities were sold in 2016.

To date, the 31 citizen-owned power stations – 27 solar and four wind – have helped to reduce carbon emissions by around 40,000 tonnes.

A voucher model, in cooperation with Spar, saw Wien Energie install solar panels on top of Spar supermarket buildings. Customers of the chain were invited to support the installation project in return for an annual shopping voucher.

As Wiener Stadtwerke's citizen-owned power stations proved so popular, the decision was taken to extend the scheme to e-mobility and give residents of Vienna the opportunity to invest in the expansion of the city's e-charging network and become part of the mobility transformation. Owing to overwhelming demand, 8,000 investment packages worth a total of EUR 2m

Wood chippings and hot water – the future of energy

Biomass is carbon-neutral and renewable.

were ultimately sold, rather than the 2,000 originally planned.

The investment model for expanding the charging network is structured as a voucher system. Voucher bundles priced at EUR 250 each are available online. In return, over five years, buyers receive a EUR 55 voucher each year, while existing Wien Energie customers receive a voucher worth EUR 65. This represents a return of 9% – an unbeatable argument for investing in the energy transformation.

For centuries, alchemists searched for the elusive philosophers' stone, a legendary substance purportedly capable of turning base metal into gold. Thinking about it, this is exactly what biomass plants do: they transform forestry waste into precious energy.

To use the correct parlance, this approach is known as "waste-to-value", and Austria's largest facility for converting biomass into electricity and heat is the biomass plant in Simmering. Each year, it converts 190,000 tonnes of wood chippings from the Austrian Federal Forests into energy. And there is no damage to woodlands as the material is simply waste produced in the course of managing the forests.

Biomass is carbon-neutral and renewable, because no more carbon dioxide is released into the atmosphere than the trees or plants absorb through photosynthesis while they are alive. The Simmering biomass power station reduces CO_2 emissions by around 144,000 tonnes a year while supplying 48,000 households with green electricity and around 12,000 with environmentally-friendly district heating.

Wien Energie also operates smaller biomass plants in Trumau and Purkersdorf in Lower Austria, where the concept is based on the principle of a sustainable closed-loop system using naturally renewable materials, and on adding value for the region.

Another example of waste-to-value in action is the production of gas from sewage sludge. Each year, Vienna's sewage plants produce around two million cubic meters of sludge, which generates around 20 million cubic metres of methane when stored in airtight tanks. This gas can be burned in cogeneration plants to produce electricity and heat. Alternatively it can be used to produce liquid fuels such as synthetic diesel, a process Wiener Stadtwerke is currently piloting at a test facility.

Electricity and heat from forestry waste

Hot spot – treasure deep below Vienna

The GeoTief project, which will receive investment of around EUR 5 million, is another project seen as having particularly strong potential. Completed at the end of 2018, a seismological survey of an area of 175 square kilometres in the east of Vienna, reaching depths of up to 6,000 metres, provided a detailed picture of the composition of the subsurface, including the location and thickness of thermal-water-bearing rock strata.

The measurements generated a huge 50 terabyte cache of data which is currently being evaluated. If the hot water resources below the capital can be used, it is safe to assume that geothermal capacity of 140 MW can be installed for the district heating network by 2030. This equates to annual CO_2 savings of up to 260,000 tonnes and could potentially supply around 135,000 households with green heating, which would represent a giant step towards safeguarding security of supply and making Vienna entirely independent of fossil fuels.

The term 'smart grid' refers to the technological shift from a passive electricity distribution system towards the proactively managed grid of the future. On a smart grid, voltage swings are balanced out by increasingly decentralised renewable generation, while state-of-the-art storage facilities are put in place and innovative e-mobility solutions are used.

The transformation of our electricity grids will boost energy efficiency while underpinning supply security.

C1
RELIABILITY AND SECURITY OF SUPPLY

C2
INCREASING ENERGY EFFICIENCY

Security of supply
→ See page 16 for details

Energy use
→ See page 16 for details

Efficient a

nd secure supply

Smart grids bring together all of the participants in the energy system via a communications network, allowing for interaction between grid components, generators, storage facility operators and consumers. New smart meters are one of the visible signs to customers of the transition towards a smart grid. These digital meters send consumption data to the system operator, subject to the customer's approval. This means consumption can be precisely measured and defined, and optimised by customers.

Smart meters make consumption visible. They allow households to identify appliances that guzzle electricity, helping customers to reduce the amount of power they use. This will also be supported by flexible tariffs in future: as demand drops and production rises at a given time, the price of electricity falls.

The first phase of moving from a passive electricity network to a smart grid involves installing sensors to monitor the condition of the grid. Afterwards, software is used to collect data on previously unknown factors such as capacity utilisation. The availability of precise grid data makes it possible to take infrastructure closer to its physical limits. This is particularly important as e-mobility and decentralised energy generation increase. Demand and production peaks will become more pronounced and more households will inject power into the grid.

Increased automation enables energy storage facilities to be brought online and managed. Buildings and PV systems can be taken off the grid at times of overcapacity, which ensures more efficient use of energy across the whole system. Wiener Netze is driving this innovation. The artificial intelligence used to manage electricity grids provides the necessary foundations for energy efficiency and supply security in future.

Reliability means 99.9% security of supply

Keeping the electricity flowing

There are 525,600 minutes in a non-leap year. Wiener Stadtwerke customers can count on reliable electricity supplies for 99.99% of this time – the average supply interruption being just 24 minutes in a year. And if it wasn't for that flashing clock radio display, outages in Vienna would go completely unnoticed.

This outstanding performance, which also leads the way internationally, is no accident; it is the outcome of intelligent energy supply system design. Here, grid resilience is the watchword. A grid is said to be highly resilient when it is not only capable of managing the majority of predictable interruptions, but also remains stable during a partial outage and returns to normal capacity rapidly following an incident. Wiener Stadtwerke uses state-of-the-art information and communications technology to quickly identify interruptions and initiate automated countermeasures.

Each year, the Group invests heavily in an electricity supply system that is up to the challenges of the future. One that is suited to the injection and distribution of decentralised renewable energy, where output is much more volatile than that from large-scale power stations that we know from the past and present, and tailored to a new status quo where consumers are increasingly producing their own electricity – these are known as prosumers. In future, the grid will not just serve as an energy supplier, but also as a customer for consumers who generate electricity in their own homes and produce surpluses from time to time – photovoltaics being a case in point.

The investments also ensure that every core element of the system is underpinned by reserve capacity, while also supporting the reorganisation of the fault-clearing service. Today, rather than operating from a central site, there are multiple bases distributed throughout the network area so that helping hands are quicker to arrive.

> Maintaining large-scale energy supply networks is a logistical and organisational challenge.

Smart electricity grid

Modern systems stand out for their ability to independently identify errors or deviations from the norm and sound the alarm if necessary – the Wiener Netze electricity grid has been a smart grid for a long time.

Intelligent transformer substations, known as iTras, are part of this approach. They are fitted with sensors that remotely supply the central control room with information on their operational status. This enables errors to be pinpointed, isolated and addressed quickly.

Switching technology also makes it possible to fix defects remotely from the control room using this system. There is no longer any need for an engineer to drive to the site and take a look at the problem. And the grid does not have to be switched off either, as the flow of electricity is simply rerouted from the damaged line to another while remote maintenance is carried out.

iTras also constantly supply data on current and voltage at various points on the grid. This optimises utilisation of transformers and delivers efficiency gains when it comes to maintenance. Smart placement of iTras throughout the Wiener Netze electricity grid meant that it was not necessary to convert all of its roughly 11,000 substations. Installed in the right position, the intelligent transformer sub-

By the end of 2019, some 75,000 smart meters had already been installed, and the number is set to rise to 1.6 million by the end of 2022.

stations monitor the areas between them to ensure blanket coverage.

Keeping the heat on

Wiener Netze operates a 1,200km district heating network that supplies heat to customers in Vienna and parts of Lower Austria and Burgenland. In February 2019 thermal inspection flights were used for the first time to analyse and optimise the network. Drones fitted with thermal imaging cameras enabled us to inspect large swathes of land and identify weak points in the network.

This innovative system helped create around 1,200 thermographic maps, and identify and fix any faults, known as hot spots. But its potential extends far beyond district heating networks. It can also help to locate sources of heat loss in cities, flag up badly insulated buildings and determine where improved insulation can deliver the biggest climate protection and energy efficiency gains.

Like the district heating system, the gas network also needs permanent monitoring. Previously, the precise location of gas pipes had to be determined using 2D maps whenever work was required. Then, the pipelines had to be paced out on foot using gas detectors to find the leak.

> Wiener Netze uses leading-edge technologies to pinpoint faults more quickly and cost effectively.

> Wiener Netze supplies energy to 2.1 million customers in Vienna.

Finding gas leaks using 3D goggles

Wiener Netze is exploring the use of 3D goggles and augmented reality to improve the efficiency of the process. This involves combining digital network plans from the geographical information system with GPS data and displaying the results on HoloLens data goggles. The result is a holographic depiction of the below-ground gas, heating and electricity grids which is accurate to within just two to five centimetres.

No more time spent searching for lines, no more test excavations, quicker and more cost-effective work processes and a reduction in emissions. Various other possible applications for the innovative goggles, including use in urban planning contexts, are currently being looked into.

So if you encounter someone wearing special data goggles it could easily be a Wiener Netze employee inspecting the virtual space beneath the road surface and helping to safeguard supply security for you.

Tomorrow starts today

The future is full of challenges for urban infrastructure. And even though Wiener Stadtwerke is a diverse group overall, it is doing a very good job of combining the strengths of the individual companies. Similarly to the way that individual sectors are being coupled at Wiener Stadtwerke to maximise energy efficiency, the different companies in the Group will be coupled in future to ensure they are able to meet the challenges posed by the city of the future.

Change is one of the driving forces behind what we do.

Sometimes, the people affected by change do not truly recognise its significance. Major, supposedly untouchable players disappear from the market virtually overnight while new ones reach for the summit. One commonly cited example is a case in point: in 1975 Kodak invented the first digital camera in history. But management continued to focus on analogue technology, allowing its innovation to gather dust in a drawer somewhere. And the rest is history: Kodak filed for bankruptcy in 2012 with digital photography having claimed supremacy. The list goes on: H&M was caught napping when it came to online retailing, and the same applies to Nokia and smartphones.

Digitalisation is an incredible driver of innovation and change. But there are risks for those that refuse to step outside their comfort zone and opportunities for people who see themselves as driving change, and do not allow themselves simply to be carried along by the tide of development. A willingness to embrace new things is an opportunity for the future.

Digitalisation and the energy transformation – the central challenges

This applies to a group like Wiener Stadtwerke with its energy and transport businesses, which are particularly exposed to change. Exposed in the sense that they are not just affected by digitalisation but also have to contend with another huge challenge: the energy transformation. This means ensuring climate-neutral energy generation and supply, and that transport is set up sustainably.

Wiener Stadtwerke identified this need for action and has responded in various ways, including with the WienMobil app, which acts as a central platform for urban and regional transport. This satisfies Group-wide demands and creates interfaces. Public transport is linked with individual transport solutions, meaning that getting from A to B is not just straightforward and convenient, but sustainable all the way.

Wiener Stadtwerke as a platform and team

Over the coming years, the next steps and the Group as a whole will be seen as a single platform. Under the One-stop shop programme, all of Wiener Stadtwerke's products and services will be made accessible centrally – both physically and digitally. It will be possible for customers to communicate and interact with all the companies in the Group by signing into a portal or visiting a bricks-and-mortar flagship store. There is no reason why this platform cannot be extended beyond Wiener Stadtwerke. The one-stop shop could also support links in a way that is similar to the external services offered via the WienMobil app. All of which shows how Wiener Stadtwerke is taking an active role in the process of change.

The Aspern Smart City Research (ASCR) project underlines just how innovative and successful the Group can be at harnessing the combined strengths of its individual companies. Urban development in the Seestadt area is under pinned by scientific research in order to develop solutions for the future of energy and transport in urban spaces. Every day, 1.5 million readings are collected and intelligently linked. Research activities focus on a wide range of use cases, such as needs-based lighting, production of waste heat from wastewater and intelligent e-vehicle charging. For years, a steady stream of international delegations have visited Aspern to ensure their cities can benefit from the discoveries being made in Vienna.

At Wiener Stadtwerke's one-stop shop, customers have full access to all of the Group's services – both online and offline – at a sinlge point of contact.

One-stop shop

The one-stop shop programme at a glance

The programme comprises the following projects which will be implemented over the next five years:

Flagship Store
Creation of a shared customer service centre. From autumn 2020, customers will have access to all of the Group's products and services under one roof.

Joint use cases
Definition of services, products and innovative customer loyalty schemes to be offered online and offline.

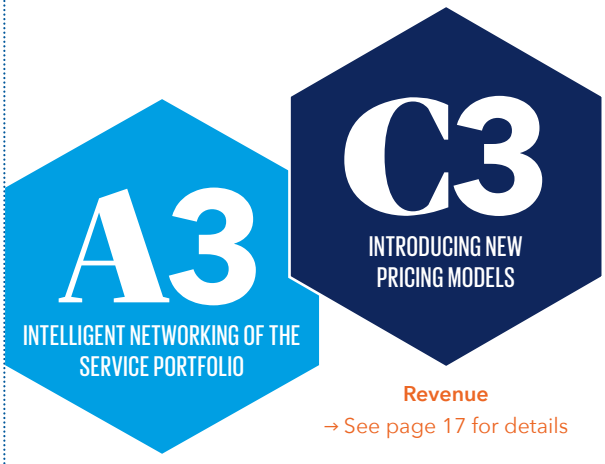
One customer
Consolidation of IT systems with the goal of building up a shared GDPR-compliant customer database.

One login
One registration and one login to access all of the Group's services.

One portal
A uniform web interface for the entire Group to provide an overview of all of the services offered by the individual companies.

Communication and change management
Interdisciplinary focusing with interfaces to all projects. A hub that allows the individual companies to act in unison as part of a customer-driven approach.

In a digitalised business environment, an omni-channel approach is the order of the day – making waiting in line and limited opening hours a thing of the past. For a modern service company to stay successful, there is no alternative to adopting an uncompromisingly customer-centred mindset. And this is precisely the vision behind the one-stop shop programme which will launch later this year. Wiener Stadtwerke is making sure it is ready for the future – thanks to its ability to see things from its customers' perspective and the goal of offering complex products in the most straightforward way possible.



Profit for the year from continuing operations
→ See page 13 for details

Revenue
→ See page 17 for details

The idea behind the one-stop shop is to build up a platform for shared services, both online and offline, which customers can visit for everything they need. The programme, which will play a major role in shaping the Group's future, involves the completion of six core projects over a period of five years. All of them are designed to maximise customers' ease of access to the services and products offered by Wiener Stadtwerke through a central platform. Used by all of the Group companies, the joint service portal is due to be fully operational by the end of 2025. The first milestone will come with the opening of the flagship store in Spittelau in autumn 2020.

It is hoped that the platform will be attractive for other services as well and that the one-stop shop does not have to limit itself to the current Wiener Stadtwerke portfolio. Expanding the platform to include other municipal services is also a possibility.

Pricing models and product bundles that add value

Wien Energie works in close partnership with various customer advisory committees in order to see the company through its customers' eyes and appreciate their needs better. The committee members contributed fresh ideas and sugges-

tions, shaping the design of individual services, products, processes and communication measures.

The input from the members of the customer advisory committees was acted upon in various ways, including for Wien Energie's Vorteilswelt customer loyalty scheme. Specifically, they helped to select suitable partner enterprises and shape the design of the overall programme. Features include flat rates, the option of sharing credits or keeping track of consumption via an app.

The outcome has been a varied tariff landscape tailored to customer requirements, covering everything from the Standard tariff for people who prefer to keep things simple, to the Float tariff which tracks energy exchange prices, allowing dynamic customers to benefit from changes in prices.

Offering fixed rates, the Garant tariff is an ideal option for anyone looking to budget for the long term. Wien Energie's Wasser.Plus tariff features 100% renewable energy and is targeted at environmentally-conscious customers. All of the tariffs share one advantage: they are all fully nuclear-free.

Another requirement identified by the customer advisory committees was a need for packages that combine the products and services offered by Wien Energie with those of other companies in the Wiener Stadtwerke Group. The "travel by public transport for lower electricity prices" promotion has been one example of this in action: customers have been able to couple their annual season ticket for Wiener Linien public transport network with the OPTIMA Garant electricity tariff in order to save on their Wien Energie electricity bills.

The advantages of this particular model are twofold, as it promotes environmentally-friendly transport while encouraging customers to opt for sustainable electricity supplies.

> In future, all of Wiener Stadtwerke's services will be united under one roof.

Another combined Wiener Stadtwerke product is the Pepi Card. Credited with EUR 35 and valid at Wipark parking facilities, this special ticket is available to Wien Energie customers for just EUR 25. In addition to offering a discount of 28%, it is also a highly convenient way to pay when leaving the car park.

There are plans to introduce more value-adding product bundles like these via the Group-wide one-stop shop, with a view to giving customers access to even more attractive offers in future.

New flagship store in Spittelau

The Wiener Stadtwerke companies offer countless different services for people living in Vienna and the surrounding area. Bringing the Group's full offering together under a single roof is the job of the new flagship store project, which is currently taking shape in Spittelau. Its goal is to maximise customer benefits. Whichever part of the Group they relate to, customer requests will be processed quickly and efficiently. The store is a central point of contact for the services and products offered by all of the Wiener Stadtwerke companies.

An element of the overarching one-stop shop programme, the flagship store is the physical, bricks-and-mortar part of the Group-wide service offering. Face-to-face contact creates a sense of security and builds trust.

Behind the scenes, everyone is working hard to bring the flagship store and its everything-under-one-roof concept to life, ready for the official opening in autumn 2020. Once open, the new service point will be the first major milestone in the one-stop shop programme.

The new flagship store will also include a shop carrying merchandising articles from the various Group companies. Among the articles on sale are products from the Funeral Museum at Vienna's Central Cemetery, which already have a cult following in the city thanks to their witty slogans.

> Intelligent networking of the service portfolio: the one-stop shop programme clears the path towards shared products and services.

"We are all enjoying the Group-wide collaboration"

An interview with
Annemarie Kouba
on the plans, concept and scheduling for the new Wiener Stadtwerke store.

Wien Energie, head of the Customer Care Center and project manager for the flagship store

You're planning to open the new Wiener Stadtwerke flagship store this year. What can people expect?

Annemarie Kouba The flagship store acts as a central point of contact for our customers where they can readily access the services and products offered by all of the Wiener Stadtwerke companies – with an emphasis on convenience and creating a pleasant experience. Part of this comes from the fact that the flagship store is easy to reach by public transport and it is designed to offer an attractive environment for our customers and employees.

What are the advantages of the new flagship store for Wiener Stadtwerke's customers?

AK The new, contemporary service point won't just be somewhere that customers can clear up energy-related matters. They can also buy their Wiener Linien annual season ticket, rent Wipark parking spaces or get information about funeral services and cemeteries – all under one roof. This saves time and means they won't have to go to multiple locations.

Can you tell us more about how the store will be set up?

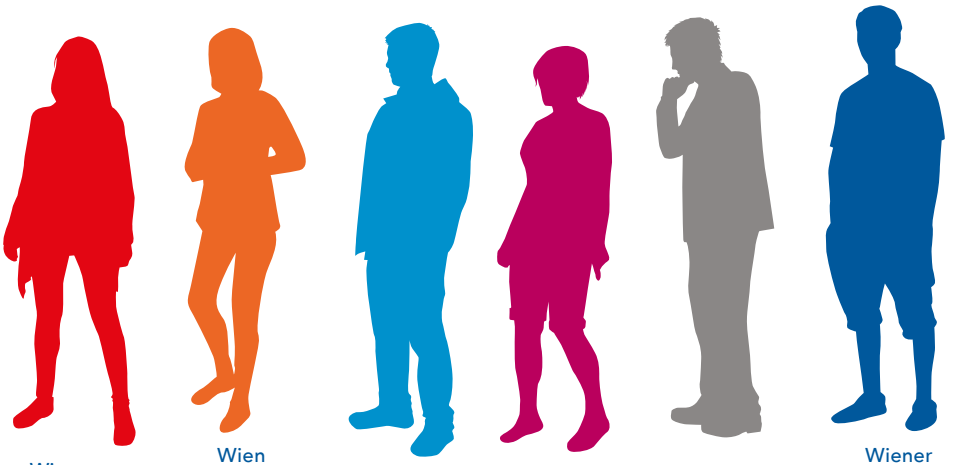
AK The flagship store will be divided into several different areas. There is a new-customer zone, an area for existing customers and a separate space for funeral services, each with its own waiting area. There will be quick counters to deal with certain common customer enquiries. The store will also have a shop where merchandising items from all of the Group companies will be on sale. A café for our customers and employees will create a special atmosphere. And finally, the flagship store will also feature a Wien Energie World of Energy experience.

Is the idea of a one-stop shop also having an effect on your brand identity? Will the different parts of the Group appear together more as a team in future?

AK Maximising customer benefits is our central goal: our aim is to offer our customers everything they need from a single source in as straightforward and uncomplicated a manner as possible. This involves creating a shared marketplace and bundling innovative products and services. This allows us to offer a broad product and service range. We are making the most of our customers' positive emotions and loyalty towards the strong brands of the different Group companies, and their individual offerings.

Why do you need a service centre moving into this age of digitalisation?

AK Our one-stop shop programme includes a strong focus



on providing innovative online services for our customers. At the same time, we know that there are still customers who prefer to go to a physical location for information and advice, and we want to showcase the full diversity of our offering to people like this at our flagship store in future. These two worlds – online and offline – are not completely separate, which is why we will be also offering an opportunity for people to explore our online services at the store.

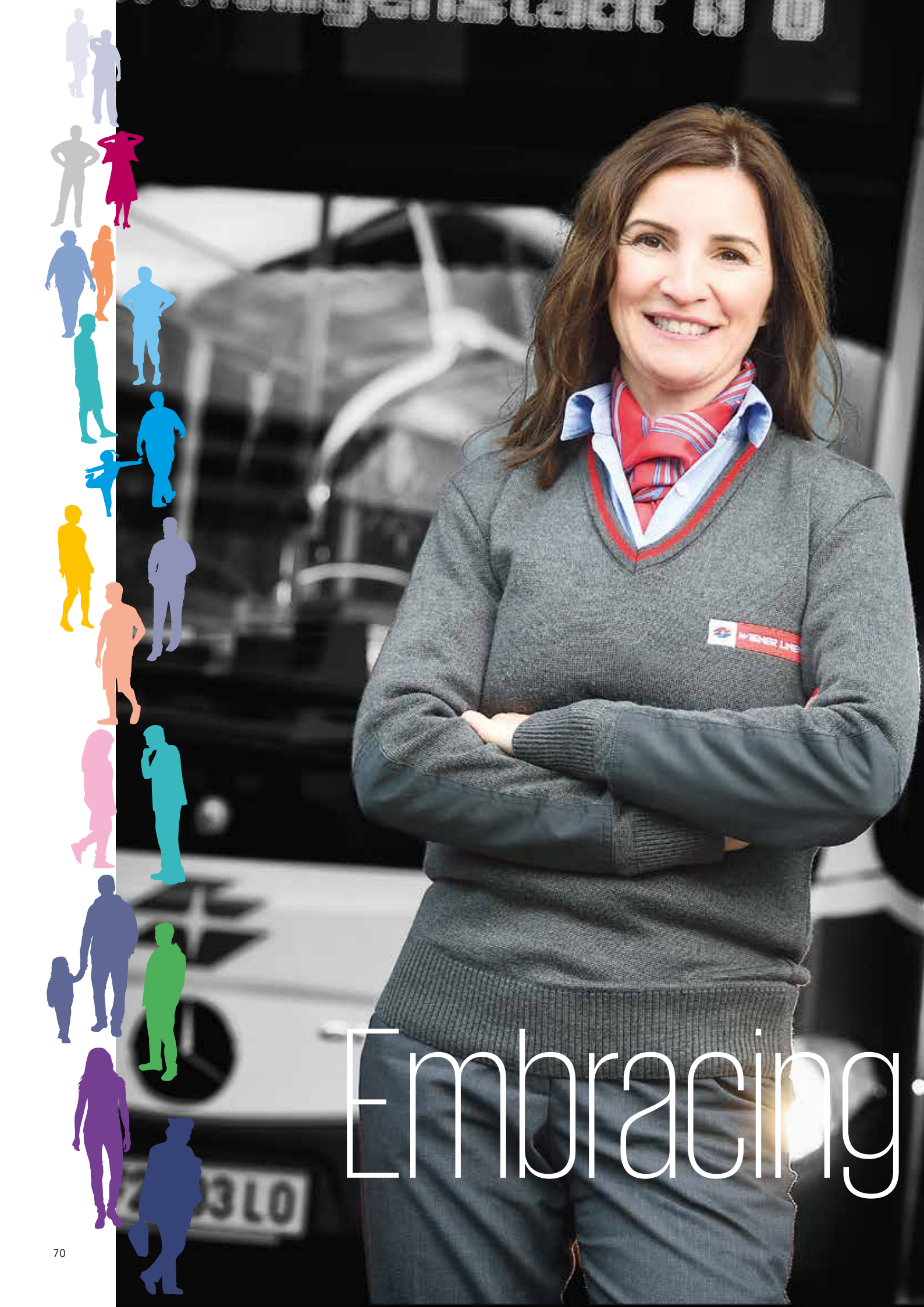
How are you getting on with the project?

AK We are putting our heart and soul into it and are all enjoying the Group-wide collaboration a lot. We're getting to know more about each other and the other companies in the Group all the time. There's a great team spirit. We have already overcome a number of challenges by working together. We've been working to a highly ambitious schedule from the outset. And due to Covid-19 we've had to adjust to the change in circumstances, particularly on the construction site.

Do you still think you will manage to open this year in spite of the crisis?

AK Yes, I'm very confident that our flagship store will open in autumn. And let me just say thank you to all of my colleagues at the different companies in the Group who have made this project possible and are working hard on it – they've done a great job!

> Together we are more than the sum of our parts. Together we are a team – the Stadtwerke team.
> ”



Embracing

People are different. Embracing diversity is a central aspect of Wiener Stadtwerke's approach, with everyone reaping the benefits.

diversity

Wiener Stadtwerke's strategic staff development activities are shaped by the core theme of diversity. The Group is the working home for many different people whose cultures, personal preferences and individual backgrounds vary greatly. And it is this diversity that makes the company strong.

A4
STRATEGIC
STAFF DEVELOPMENT

Personnel expenses and employee benefit provisions
→ See page 13 for details

There are many sides to diversity, including nationality and culture, gender, social background, disabilities, education, sexual orientation and age. Wiener Stadtwerke provides numerous possibilities for its employees to productively embrace diversity at the Group. Firstly, as it employs around 15,000 people, the Group is by its very nature highly diverse, and secondly Wiener Stadtwerke also represents a broad spectrum thanks to its different business areas.

Staff members with lots of different skills, approaches and ideas look after our customers. Diversity brings new ways of seeing things, promotes creativity and is a central component of sales and customer care at any service-oriented company.

Diversity fuels creativity

Innovation and creativity are key aspects of a healthy approach to diversity. Teams need people with different talents, ways of thinking and experiences to come up with new ideas. An innovation workshop exclusively attended by men of the same age, with similar educational backgrounds and career paths is less likely to come up with vibrant ideas. Diversity management is a strategic approach that promotes creativity and continuous development.

Employees with restricted mobility are an important and productive part of the team. Workstations are made fully accessible so that colleagues with disabilities can participate in the labour market without prejudice or discrimination.

At Wiener Stadtwerke, diversity is a focus in all aspects of the HR department's work. Recruitment processes are geared towards creating teams that are as diverse as possible, while still taking quality criteria fully into account. It goes without saying that every single employee at the Group has the professional qualifications required for their post.

Promoting women and networking

Gender is another central aspect of diversity. Group-wide equality guidelines have been in place at Wiener Stadtwerke since 2017. They are designed to ensure equal numbers of men and women in all parts of the company, with a particular focus on management positions.

In a Group with such a strong technical focus, structural imbalances are not altogether unusual. That said, there is no reason to accept the status quo in silence. Wiener Stadtwerke has implemented various initiatives aimed at actively promoting the advancement of women.

The Group guidelines state that in recruiting processes for positions where women are underrepresented, preference should be given to the female candidate in situations where male and female applicants are equally qualified. The same applies for areas where men are underrepresented, and in such cases, preference would be given to the male applicant.

Wiener Stadtwerke also supports various initiatives designed to help women network more effectively with each other, including the cross-mentoring programme set up by ÖBB and Asfinag around three years ago. Under this year-long scheme, mentees receive support in realising their career ambitions from more experienced female colleagues, with a view to increasing the proportion of women in managerial positions at Wiener Stadtwerke in the medium term.

Tailored to female managers, Wiener Stadtwerke's InFRA Brunch follows a similar path. InFRA is a twice-yearly opportunity to network, compare notes and exchange information. The format also features external speakers from business, political and technical backgrounds who talk about their experiences and career paths. Role models who encourage all concerned to make the Group's management even more diverse in future.

A successful career start

Wiener Stadtwerke offers state-of-the-art apprentice schemes in a high-tech environment. In 2020, another 140 young people embarked on their new careers with us, helping to shape a successful future for our Group in the process. Training the next generation of experts is not just essential for the success of our economy, it is also about actively taking responsibility for young people. Wiener Stadtwerke is fully aware of the vital responsibilities it has in this respect. The Great Start! certificate, which was awarded in recognition of our outstanding apprenticeship culture, takes feedback from those in work placements into account, as well as the Group apprenticeship scheme.

> In 2019, staff throughout the Group completed 61,056 training and education days.[1]

1) not including apprentices

Wiener Stadtwerke is training more than 400 apprentices in a range of careers.

To ensure that it is an attractive employer for apprentices, Wiener Stadtwerke always looks to them for feedback – as shown in the following interview with Jessica Greiner, a trainee mechanical engineer in the second year of her apprenticeship, and trainee office administrator Marcel Schwing, who is also in his second year.

What made you choose an apprenticeship at Wiener Stadtwerke?

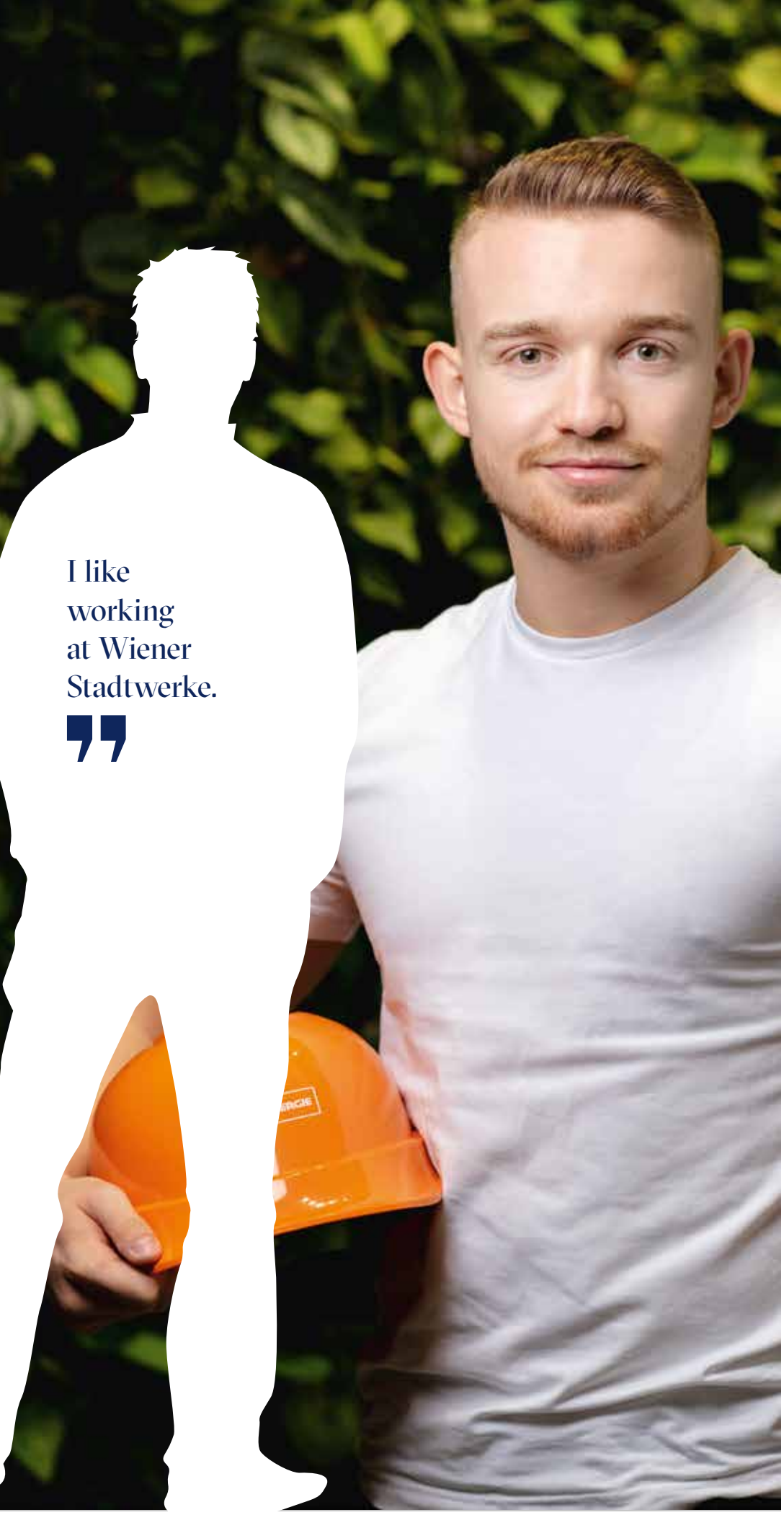
Jessica Greiner As part of my work placement in the main workshop I was taken on a tour of the different departments. I immediately saw how many different layers there are to the company and what a great working atmosphere there is.

Marcel Schwing For me, it was also the different divisions at Wiener Stadtwerke, and that's why I was very interested in the Group right from the start.

Did you have any trouble adjusting to the world of work? What support were you given?

MS I found it quite difficult to begin with, as you are expected to decide lots of things on your own. And generally speaking, I had a clear sense that I was expected to take responsibility. My colleagues were always there with a word of support and quickly helped me to get used to it.

JG I got off to a bit of a bumpy start because I was still unsure about what I wanted to do. The Public Employment Service



Austria (AMS) apprenticeships definitely helped.

Was there anything that turned out differently to the way you pictured it?

JG I was fully prepared not to be listened to or taken seriously as a girl in a workshop. But the opposite turned out to be true – people value my opinion, too.

What do you find most appealing about the job?

MS The interpersonal exchange with customers and colleagues. Thankfully, I just like talking to different people, even though I can come across as quite shy to start with.

JG I love working with machinery and seeing how raw materials are transformed into functioning mechanical components.

What career plans do you have for the future?

MS Right now I'm combining my apprenticeship with my school leavers' certificate. I would also like to study at some point, if I can find a way to do that alongside my day job. I think something in business would interest me the most.

If a friend asked you whether they should do an apprenticeship with Wiener Stadtwerke, what would you say?

MS I'd definitely recommend Wiener Stadtwerke and hope that they would at least try to apply for a place.

JG I would do the same and use my arguments to encourage them even more. Later on, I would like to work as a coach to help inspire young people and pass on my expert knowledge with the same skill that it is being passed on to me today.

The future's digital

At first glance it looks like these two things have very little do with one another: the fact that Wiener Linien operates several hundred track lubricating units and that Wien Energie receives around 400,000 e-mails a year. What they have in common only emerges after a closer look. It has to do with digitalisation and the changes this brings for the world of work, something that has two contrasting effects. Firstly, it helps to make internal processes more efficient, but it also poses fresh challenges for employees.

B4
DATA SECURITY

B3
FOCUS ON DIGITALISATION

Equity
→ See page 15 for details

Other provisions
→ See page 15 for details

> The world of work is currently undergoing a process of rapid and fundamental change. Digitalisation will shape the workplace of the future.

Wien Energie's 400,000 e-mails a year fall into the first category: optimisation of internal processes through digitalisation. Until now, every single one of these incoming messages had to be looked at, read, evaluated and assigned to the department responsible for dealing with it. This takes time, and as it is not always error-free, it has an impact on the quality of service for customers.

In future, incoming correspondence will be pre-sorted using machine learning. Going forward, mails will be correctly assigned automatically once their content has been analysed to see whether it's a complaint, change of address or something else entirely. 200,000 e-mails which had previously been categorised by humans provided the starting point for the self-learning machine. The advantage of this initial categorisation lies not only in increased process efficiency, but also in the way it allows team leaders to build up a better picture of the areas that generate the most e-mails, allowing staff to be assigned more effectively.

Digitalised work calls for new skills

The example of the track lubricating units gives an indication of the new challenges that digitalisation brings for Wiener Stadtwerke employees. In the past, these machines had to be regularly shut down, checked and, if necessary, refilled. But in future, a core element of digitalisation at work will come into play instead: remote maintenance. In this particular example, this means that sensors fitted to the units will ping a message to the maintenance centre once fill levels dip below a certain point. Although no-one will have to drive around checking fill levels, top-ups will still be necessary and the staff involved in keeping everything running smoothly will require digital skills. They will need to be in a position to adjust, operate and understand the remote maintenance system.

This is just a simple example of how the digital transformation calls for adaptability in the workplace. It is about a mental change, joined-up thinking and an interdisciplinary mindset when it comes to work. To help promote this, the Group Staff Development department at Wiener Stadtwerke has devised a new intranet tool: the Digi. Index.

The system shows employees and management whether they are already a Digi.Guru, Digi. Influencer or still a No.Digi. They can also use it to find out what applications are available to help them extend their digitalisation expertise. Additionally, Group Staff Development offers targeted training courses. Various different formats – including face-to-face sessions, e-learning courses and blended learning modules – are designed to reach out to as many employees as possible while taking their particular needs and preferred learning methods into account in order to enhance the level of digitalisation expertise throughout the Group.

Working 9 to 5 – a thing of the past

The idea that the world of work is in a state of flux is also borne out by the fact that flexibility and mobility are increasingly important factors. The age of having to be physically present at an assigned workplace during set hours is coming to an end. At Wiener Stadtwerke, flexitime and homeworking models have been developed in line with the needs of the individual departments. Staff have more flexibility when it comes to choosing their preferred place of work and are free to choose when they work within certain parameters. There are also different flexitime models available which are specifically tailored to the various departments.

Wiener Stadtwerke launched the Future Work Challenge to ensure it attracts the next generation of employees. This ideas competition invites young people to share their vision for a more attractive working environment, giving them a chance to voice their ideas, shape the future and win attractive prizes. Over the course of several days, the winning teams have the opportunity to get to know Wiener Stadtwerke more closely and fine-tune their ideas with the support of experts in the field.

This programme earned Wiener Stadtwerke a coveted award: bronze in the Recruiting & Employer Branding category at the HR Inside Summit.

Cybersecurity protects IT systems and data

Cybercrime is the flip side of digitalisation. And it has many different faces. Fraudsters seek to exploit the way we are closely networked and are proving extremely resourceful when it comes to finding new ways of getting their hands on other people's money. Tactics range from the now-famous CEO scam where falsified e-mails purportedly from management urge employees to transfer money to accounts abroad, to using malware to spy on and steal user data which along with

details such as home addresses, mobile phone numbers and credit card numbers are exploited for fraudulent purposes.

Every company that uses networked communications has to make sure that cybercriminals do not stand a chance of compromising its IT systems. Wiener Stadtwerke manages large amounts of information of all kinds and origins. The Group is also responsible for critical infrastructure such as energy grids. Stable and permanently available IT infrastructure is the top priority. Steps are taken expressly to prevent the loss, falsification or unwanted publication of data.

Wiener Stadtwerke's systems are integrated into WienIT's IT landscape and regularly stress-tested to guarantee they always adhere to the highest security standards. All of the elements of the IT system are targeted using the same methods that hackers deploy, in order to ensure that they are not vulnerable to unauthorised access. These tests determine the susceptibility of the system to attack, allowing any potential weaknesses to be pinpointed and addressed immediately.

IT security regulations are laid out in a separate IT security policy, which outlines the fundamental approach and goals in this area. Derived directly from the IT security policy, the IT security guidelines are aimed at every single member of staff.

Raising awareness is an essential aspect of cybersecurity. Various training courses are offered to help employees identify potential threat scenarios and dangers. The courses cover a range of topics, including how to spot phishing mails and what cybersquatting – the creation of fake websites designed to deceive users – means. Vigilance is essential to prevent cyberattacks happening in the first place.

Targeted attacks often seek to exploit employees' lack of thoroughness or attention. Training and education provide an effective barrier against would-be attackers.

"IT security is a central aspect of all decisions"

An interview with **Herbert Schindelka,** Wiener Stadtwerke's Chief Security Officer, on the topic of data security.

Can you give us an idea of the role data security plays at the Wiener Stadtwerke Group? What data come into your computer centres and how sensitive are they?

Herbert Schindelka Data security and a responsible approach to handling company data play an important role at Wiener Stadtwerke. The focus is on customer, employee and internal data. Depending on the classification, they are subject to different processes. Sensitive data are encrypted and/or saved in two locations in the internal computer centres.

Does digitalisation make your job more complex? What is the impact of increased integration of modern sensors in systems or the expansion of the smart grid?

HS The demands placed on data security are more complex as a result. The growing proportion of mobile components such as smartphones and tablets calls for new technology and continuous adaptation of IT security standards.

There are also more applications in the internet of things ▶

(IoT). To address this, we implemented a special platform for communicating with end devices and for processing data. At the same time we have drawn up our own security regulations that cover every stage, from the sensors themselves to transmission of data and an IoT platform.

What technical measures are you taking to safeguard data security?

HS Technical measures are primarily aligned to threat scenarios and risk assessment. This led to the implementation of a security information and event management (SIEM) system and an intrusion detection system (IDS) to identify attempted security breaches. IT security structures are under continuous development. They are regulated by the Austrian Network and Information System Security Act, which covers critical infrastructure such as that operated by Wien Energie, Wiener Netze and Wiener Linien. For this area, all the necessary preparations for ISO 27001 certification were taken.

How do you test your security standards and determine whether the steps you have initiated are working?

HS Certification of the Group companies provides the foundation for a corresponding management system. In addition to numerous internal regulations – such as those for administrators – we have also drawn up requirements for the procurement of IT systems. IT security audits in specific focus areas are carried out by external experts. And all of these measures are backed up by staff training.

So this means that data – both customer data and data from your own systems – are in good hands?

HS Yes, exactly, because IT security is a central component of data processing for Wiener Stadtwerke – and an integral part of all IT decisions. Organisational and technical measures guarantee high standards. The Group-wide organisation structure supports the use of modern technology while needs-based deployment safeguards IT security standards.

Continuous adaptation of IT security standards is essential.

"One of our top priorities is ensuring that we always operate in a responsible and completely ethical manner. We take all violations of our values very seriously."
Christian Delpos
Chief Compliance Officer

to these high standards. All Group employees are obliged to comply with the regulations set out in the code and to report any breaches, either directly to their line manager or the compliance officer, or via the online whistleblower platform. Staff can submit evidence completely anonymously using this protected platform, and leave the matter in professional hands. Evidence is forwarded to the appropriate contact person and treated with the utmost care and sensitivity. Compliance is not an end in itself, rather it ensures that particular significance is attached to integrity, reliability, transparency and a sense of responsibility, as well as to ensuring the high quality of the services the Group provides. Corruption, fraud, theft and discrimination have no place in this environment. As far as social networks and the media are concerned, only general managers and heads of communication are permitted to make public statements about the Group or Group companies. Compliance with the code of conduct by all employees

Other provisions
→ See page 15 for details

Raw material and consumables used, and other expenses
→ See page 17 for details

We take responsibility

As a publicly owned company, Wiener Stadtwerke is expected to meet particularly high standards of integrity, reliability and transparency, and in terms of its sense of responsibility. In some cases, it may not be totally clear whether actions would be acceptable or represent a breach of restrictions. At the Group companies, compliance officers are on hand to provide expert support in such situations. The Group's code of conduct also enables employees to live up to these high standards. All Group employees are obliged to comply with the regulations set out in the code and to report any breaches, either directly to their line manager or the compliance officer, or via the online whistleblower platform. Staff can submit evidence completely anonymously using this protected platform, and leave the matter in professional hands. Evidence is forwarded to the appropriate contact person and treated with the utmost care and sensitivity. Compliance is not an end in itself, rather it ensures that particular significance is attached to integrity, reliability, transparency and a sense of responsibility, as well as to ensuring the high quality of the services the Group provides. Corruption, fraud, theft and discrimination have no place in this environment. As far as social networks and the media are concerned, only general managers and heads of communication are permitted to make public statements about the Group or Group companies. Compliance with the code of conduct by all employees helps to safeguard the Group's impeccable reputation.

Effects outside the Group

Wiener Stadtwerke is the City of Vienna's key partner when it comes to maintaining and extending the capital's public infrastructure. As a publicly owned company, we are fully aware of the responsibilities that come with this role. All of our management decisions are informed by the need to uphold quality of life in the city. In addition to the services we provide, the economic impact of our activities is key to achieving this. Wiener Stadtwerke is one of the largest groups in Austria, both in terms of output and as an employer, meaning that the Group has a decisive socioeconomic influence on life in Vienna.

Glossary

Biodiversity
Biodiversity (biological diversity) is the variety and variability of living organisms of all origins.

Combined heat and power
The simultaneous generation of electricity and heat (combined heat and power) maximises fuel efficiency.

Compliance
Adherence to laws, guidelines and voluntary codes of conduct by companies.

Energy efficiency
Energy efficiency is the ratio of energy output to energy inputs. (Power generation at power stations inevitably involves the transformation of a large part of the primary energy employed into heat. This heat is used at CHP stations for district heating.)

GDPR
The General Data Protection Regulation (GDPR) is a European Union regulation that harmonises the rules for the processing of personal data by private entities and public authorities throughout the EU. It is aimed at protecting personal data within the EU and ensuring the free movement of data within the European single market.

Materiality matrix
Materiality analysis is a tool used as part of strategic analysis. Its purpose is to identify key sustainability-related matters for a company and its stakeholders. Materiality analysis consists of environmental analysis (external analysis), business analysis (internal analysis), and analysis of stakeholder expectations. The outcomes of these three parts feed into a materiality matrix.

Modal split
This refers to the percentage breakdown of total traffic volume into the various transport modes.

Photovoltaic system
A system that uses sunlight to produce electricity. If it produces heat, it is called a solar thermal system.

Renewable energy
Renewable or regenerative energy sources are those which provide practically inexhaustible supplies of sustainable energy over the duration of humanity, or which are renewed relatively quickly. Alongside efficient energy use, renewables are seen as the main pillar of sustainable energy policies and of the energy transformation.

Sector coupling
In the energy industry, sector coupling refers to the interlinking of different sectors with the aim of optimising them by means of a joint, holistic approach. In the past, the electricity and heating (and cooling) sectors were seen as being largely separate from one another.

Security of supply
Security of supply means that electricity consumers are able to obtain electricity of defined quality when they need it, at cost-reflective and transparent prices.

Smart city
The expression ‘smart city’ refers to a city where information and communication technology, and resource-efficient technologies are systematically deployed in order to conserve resources, enhance citizens’ quality of life and the competitiveness of the local economy, and ultimately increase the city’s sustainability. At the very least, energy, mobility, urban planning and governance are addressed.

Smart grid
A smart grid is an intelligent power network capable of two way communication and control of power generators, storage equipment, consumers, and grid infrastrucutre in transmission and distribution grids. The aim is to connect distributed generating stations and those with volatile output (e.g. from renewable sources such as photovoltaic, wind and biogas plants) to the grid without compromising network stability, which in turn underpins efficient and reliable system operation as well as security of supply.

About this report

Wiener Stadtwerke's 2019 report consists of three related parts: an annual report, a financial report and a sustainability report. The annual report presents developments at Wiener Stadtwerke and the figures behind them, the financial report comprises an operating and financial review, financial statements and notes prepared in accordance with IFRS, and the sustainability report (available in German only) covers environmental and social aspects of the Group's performance, as well as innovations. In the interests of efficiency and to avoid redundancy, the publications increasingly cross-reference each other. For instance, the forewords by the Management Board, the representative of the owners and the Chairman of the Supervisory Board are only published in the Wiener Stadtwerke annual report.

Imprint

Proprietor and publisher
Wiener Stadtwerke GmbH
Thomas-Klestil-Platz 13
1030 Vienna

Project management
Group Communications
Thomas Geiblinger
+43 (0)1 53123 73953
thomas.geiblinger@wienerstadtwerke.at

Press Officer
David Millmann, B.A.
+43 (0)1 53123 73953
david.millmann@wienerstadtwerke.at

Concept, copy and design
Mensalia Unternehmensberatung
www.mensalia.at

Photos:
Cover: IWS TownTown AG
p.2, p.7, p.45, p.53, p.68, p.77, p.79:
Wiener Stadtwerke archives
p.5, p.21, p.39, p.41, p.55: Ian Ehm
p.54: Christian Fürthner
p.18, p.25, p.29, p.34, p.36, p.39,
p.46, p.50, p.52, p.56, p.73, p.74:
Gianmaria Gava
p.28, p.34: Manfred Helmer
p.48: FOTObyHOFER
p.6: Alexandra Kromus
p.8: Christopher Mavric
p.64: Katharina Puxbaum
p.38, p.42: Wien Energie
p.70: Wiener Linien
p.58, p.60: Wiener Netze
p.22, p.26, p.29, p.30, p.32, p.33, p.39:
Johannes Zinner

WIEN ENERGIE | WIENER NETZE | WIENER LINIEN | WIENER LOKALBAHNEN | WIPARK | BESTATTUNG & FRIEDHÖFE WIEN