## **KWD** globalpipe

**KWD Market + Charts** 

## **Heating & Plumbing Pipes**

Consumption of pipes by material and country

Europe 2021

Dipl.-Ing. Jutta Hix, Achim Seydel





### Foreword

Dear reader, when we published our last issue of our KWD Market + Charts market report, the Corona Pandemic was just beginning. This hit all areas of life hard and thus, of course, the construction sector as well.

We finally decided to launch the report anyway and developed the crisis calculator to mitigate the Corona effects. This enabled anyone to enter any market changes in percent per country and see the effects on pipe consumption.

In the meantime, the situation in the construction industry has calmed down and we all hope to be able to lead a more or less normal life again.

However, as a result of the crisis, there are problems with transportation and thus with the supply of raw materials. The drastic resumption of consumption has led to high levels of activity in various sectors and thus to a further shortage of raw materials. The effects cannot really be predicted.

In order to be able to influence any effects that may arise as a result of any problems, we have decided to supply the crisis calculator tool again. This allows special effects to be taken into account for the years 2022 and 2023. The pipe consumption figures will then be recalculated according to individual estimates.

In any case, we are pleased that you have decided to purchase this KWD Market Report and will be happy to answer any questions you may have.

Jutta Hix and Achim Seydel

November 2021

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## 1 Introduction

## 1.1 Author

Author of this yearly updated KWD Report "'Heating & Plumbing Europe 2021"' are the chief-editor of the KWD newsletters Jutta Hix and the consultant for plastic pipes Achim Seydel.

Dipl.- Ing. Jutta Hix (née Hamich) has studied plastic engineering in Darmstadt /Germany, followed by 15 years working in Marketing and Sales departments. In 2005, she joined her father's publishing house, which had been founded in 1974, and in 2009, after her father Winfried Hamich had died, she took over the family managed publishing house. She is the chief-editor of the weekly published newsletters KWD-SHK and KWD-globalpipe, which inform about the products, markets, companies and applications for pipes and fittings. She is also the author of different Market Reports for pipes and fittings in hot & cold water and heating installations.

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Achim Seydel is working as a consulting for heating & plumbing industry in the field of pipes, systems and technologies. With more than 30 years experience in production, development and sales of plastic pipes and pipe systems for pipe installations in housing technology Achim Seydel advises today companies in this business worldwide. This includes product recommendations (pipes, fittings and accessories) and pipe production advices (PE-X pipes and multilayer pipes).

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## 1.2 An Introduction to the Report Update

The present report KWD Market + Charts "Heating & Plumbing Pipes Europe 2021" is prepared on a regular basis. The report estimates how many million meters of pipe have been used in domestic installations in Europe and lists them according to pipe materials and application areas (see chapter 1.3). This report considers the 19 European countries that are listed in Euroconstruct under EC 19.

Response to the consequences of the Corona Pandemic

When we published our last issue of our KWD Market + Charts market report, the Corona Pandemic was just beginning. This hit all areas of life hard and thus, of course, the construction sector as well.

We finally decided to launch the report anyway and developed the crisis calculator to mitigate the Corona effects. This enabled anyone to enter any market changes in percent per country and see the effects on pipe consumption.

In the meantime, the situation in the construction industry has calmed down and we all hope to be able to lead a more or less normal life again.

## Crisis Calculator

However, as a result of the crisis, there are problems with transportation and thus with the supply of raw materials. The drastic resumption of consumption has led to high levels of activity in various sectors and thus to a further shortage of raw materials. The effects cannot really be predicted.

In order to be able to influence any effects that may arise as a result of any problems, we have decided to supply the crisis calculator tool again. This allows special effects to be taken into account for the years 2022 and 2023. The pipe consumption figures will then be recalculated according to individual estimates.

## 1.3 Analyzed Materials and applications

In the report at hand, we provide market estimates broken down by country for the use of indoor pipes. Thereby the report estimates the pipe consumption in three different fields of applications.

FH: under floor heating / surface heating and cooling

RA: radiator connection

SA: hot and cold water / sanitary systems

The market report analyses the following pipe materials, which are used in hot&cold water and heating installations:

## Metal Pipe Materials

Steel: Steel / C-SteelCopper: Copper

• StSteel: Stainless Steel

## **Plastic Pipe Materials**

■ PEX: Crosslinked Polyethylene (total of PE-Xa, PE-Xb and PE-Xc)

• PE-RT: Polyethylene of Raised Temperature Resistance

■ PP-R: Propylene Random Copolymer

■ **PB**: Polybuthylene

## Multilayer / Composite Pipes

■ PEX / AI / ... : Aluminium Multilayer Pipe with PEX as Inliner Material

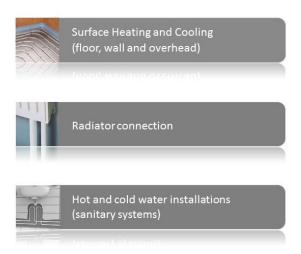
■ PE-RT / Al / ... : Aluminium Multilayer Pipe with PE-RT as Inliner Material

## 1.4 Mainly used pipe materials by application

As described in chapter 1.3. "Analyzed Materials" we are dividing the sector of Heating&Plumbing Installations into the three areas: surface heating&cooling, radiator connection and sanitary installations. The still most used pipe material in Europe across all applications is copper pipe, followed by multi layer pipes and PEX/PE-RT pipes.

But there are some countries, that deviate from the European Trend. In this present KWD market report you will find detailed information about the consumption of pipes by material and application for each European Country.

## Applications for heating & plumbing pipes



## Main usage of pipe-materials



## 1.5 Methods of KWD Market Research

Since about 1970 we strive towards market figures and trends for pipes and fittings. Because there was virtually no statistical information available on this segment, we started to collect these facts and figures.

In the field of "Heating & Plumbing Pipes", everything began with the floor heating technology which initially was available just in Austria, Switzerland and Germany before taking off and spreading out pretty fast to Italy, Scandinavia and the rest of Europe and partially worldwide. Today we are specialized on pipes and fittings in heating & plumbing applications.

The regularly updated report KWD Market + Charts "Heating & Plumbing Pipes Europe" shows the consumption of pipes by pipe material, application and country.

When working on the report, we start with general information on economic developments, country-specific support programs as well as statistical data and forecasts for housing completions and modernization.

In our analysis tool, we revise the basic data on pipe consumption, i.e. the estimate of how many pipe metres are used per application and country per housing unit.

Now we have a lot of background information. At this point we now turn our attention to the pipe manufacturing industry. During the last month we have spoken to very many representatives from the heating & plumbing industry: Pipe producers, pipe system distributors, raw material manufacturers, pipe extrusion line producers, institutes and other organizations. We have visited many trade fairs and companies. We have discussed product development, applications, and company developments, and with each of them we have discussed some of the figures.

The conclusion of these results can be found in the present report. The figures are clearly presented in tables and graphs.

## 2 Statistics: Country and Construction Information

## 2.1 Basic Information and Economy Growth (GDP) by Countries

Basic Information				Econo	my: Gross	Domest	ic Produ	ıct (1)
Country	Capital	Popu	lation	2019	2020	2021	2022	2023
Austria	Vienna	8,9	Mio.	1,4%	-6,6%	3,4%	4,3%	2,5%
Belgium	Brussels	11,5	Mio.	1,7%	-6,2%	4,1%	3,5%	1,7%
Czech Republic	Prague	10,7	Mio.	2,3%	-5,6%	2,3%	3,7%	2,1%
Denmark	Copenhagen	5,8	Mio.	2,9%	-2,7%	2,7%	3,4%	2,4%
Finland	Helsinki	5,5	Mio.	1,3%	-2,8%	2,9%	2,3%	1,2%
France	Paris	67,1	Mio.	1,5%	-8,1%	5,4%	4,0%	2,0%
Germany	Berlin	83,2	Mio.	0,6%	-4,9%	3,5%	4,0%	1,0%
Great Britain	London	67,5	Mio.	1,4%	-9,8%	6,9%	6,0%	1,8%
Hungary	Budapest	9,8	Mio.	4,6%	-5,0%	5,0%	5,5%	4,1%
Ireland	Dublin	5,0	Mio.	5,6%	3,4%	5,0%	4,6%	3,1%
Italy	Rom	59,3	Mio.	0,3%	-8,9%	4,1%	4,3%	2,1%
Netherlands	Amsterdam	17,5	Mio.	1,7%	-3,7%	2,2%	3,5%	1,8%
Norway	Oslo	5,4	Mio.	0,9%	-0,8%	3,0%	3,9%	2,6%
Poland	Warsaw	38,2	Mio.	4,7%	-2,7%	4,1%	5,5%	5,2%
Portugal	Lisboa	10,2	Mio.	2,0%	-7,1%	6,1%	4,1%	4,1%
Slovakia	Bratislava	5,5	Mio.	2,3%	-5,2%	3,3%	6,3%	2,8%
Spain	Madrid	47,2	Mio.	2,0%	-10,8%	6,0%	5,0%	2,5%
Sweden	Stockholm	10,6	Mio.	1,4%	-2,8%	3,7%	3,4%	2,0%
Switzerland	Bern	8,7	Mio.	1,1%	-2,9%	3,0%	2,8%	1,3%

2020, 2021: Forecast / 2023: Outlook

(1) Economic Growth: Gross Domestic Product, (2) Population 2021 (Forecast) in million inhabitants

Source: Euroconstruct, June 2021

## 2.2 Total Volume of Construction Output

Total volume of construction output in Euroconstruct countries (percentage changes in real value) Estimate Forecast Forecast Outlook Country 2017 2018 2019 2020 2021 2022 2023 **Austria** 2,5% 3,6% 3,6% -3,3% 3,5% 2,4% 1,9% Belgium 2,1% 3,3% 1,6% -4,7% 6,1% 1,9% 2,4% 2,9% Denmark 3,0% 1,3% 7,8% 6,1% 1,8% 2,0% **Finland** 1,9% 1,7% -1,8% 1,4% 1,1% -0,8% -3,0% **France** 3,9% 3,1% 2,2% -12,7% 7,0% 3,3% 1,5% Germany 2,1% 2,0% 2,0% -0,9% -0,6% 0,2% 0,2% **Great Britain** 6,0% -0,1% 2,4% -11,1% 11,4% 5,2% 3,2% Ireland 14,9% 13,1% 8,4% -8,6% -6,4% 14,6% 9,5% Italy 0,5% 1,9% 3,4% -4,6% 8,7% 4,7% 3,6% Netherlands 3,9% 6,6% 3,1% -2,5% -1,6% 4,4% 4,0% **Norway** 3,5% -2,0% 1,8% -0,1% 5,4% 2,0% 0,2% 1,4% **Portugal** 11,2% 10,3% 8,4% 3,4% 0,4% 1,0% Spain 5,1% 6,4% 4,5% -10,4% 5,5% 6,0% 3,5% Sweden 6,2% -1,0% 1,2% 1,4% 2,7% 1,4% 1,9% **Switzerland** 1,2% 0,9% -0,3% -0,7% 0,5% -0,6% 0,6% **EC-15** 3,4% 2,5% 2,6% -5,2% 4,1% 2,9% 2,0% Western-Europe Czech Republic 4,5% 7,0% 1,1% -3,6% -0,9% 2,8% 2,3% 25,5% 19,8% 16,3% -7,1% -1,3% 7,9% 7,6% Hungary **Poland** 7,2% 4,9% -0,2% 3,3% 14,4% -2,0% 2,9%

Source: Euroconstruct June 2021

EC-4 Eastern-Europe

EC-19 Europe

3,8%

8,5%

3,7%

8,0%

12,8%

3,0%

-4,7%

5,1%

2,8%

-12,7%

-3,8%

-5,1%

1,9%

-0,5%

3,8%

8,3%

3,9%

3,0%

4,3%

3,8%

2,1%

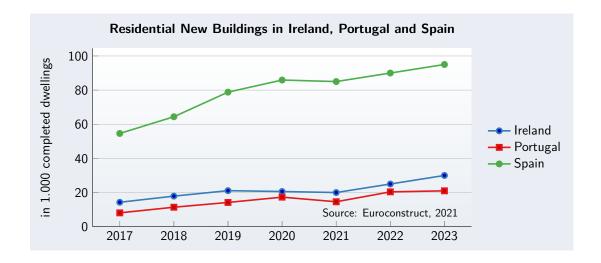
Slovakia

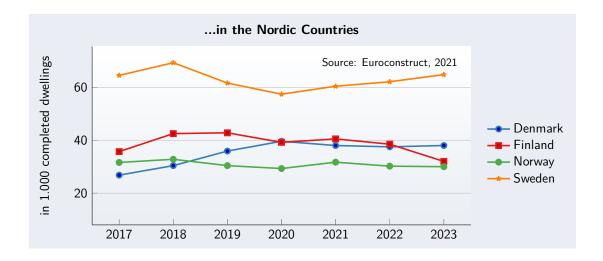
## 2.3 Residential New Buildings (completed units) by Country

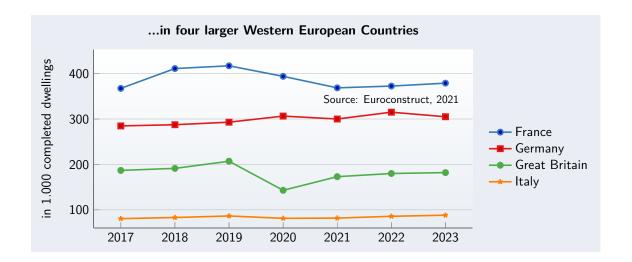
Residential New Buildings by Countries in Europe (EC19) 2017 - 2023 (in 1.000 Units and % change)

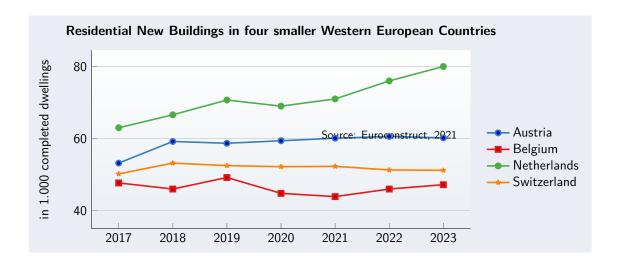
Euroconstruct	2016	20:	17	20	19	20:	20	20	21	202	22	202	23
Austria	53,2	59,2	11,3%	58,7	-0,8%	59,4	1,2%	60,1	1,2%	60,6	0,8%	60,2	-0,7%
Belgium	47,7	46,0	-3,6%	49,2	7,0%	44,8	-8,9%	43,9	-2,0%	46,0	4,8%	47,2	2,6%
Denmark	26,8	30,4	13,4%	35,9	18,1%	39,6	10,3%	38,0	-4,0%	37,5	-1,3%	38,0	1,3%
Finland	35,7	42,5	19,0%	42,8	0,7%	39,2	-8,4%	40,5	3,3%	38,5	-4,9%	32,0	-16,9%
France	367,4	411,1	11,9%	417,1	1,5%	393,9	-5,6%	368,6	-6,4%	372,5	1,1%	378,9	1,7%
Germany	284,8	287,4	0,9%	293,0	1,9%	306,4	4,6%	300,0	-2,1%	315,0	5,0%	305,0	-3,2%
Great Britain	186,8	191,3	2,4%	207,0	8,2%	143,0	-30,9%	173,0	21,0%	180,0	4,0%	182,0	1,1%
Ireland	14,3	17,9	25,2%	21,1	17,9%	20,6	-2,4%	20,0	-2,9%	25,0	25,0%	30,0	20,0%
Italy	80,6	83,1	3,1%	86,5	4,1%	81,3	-6,0%	81,8	0,6%	85,8	4,9%	88,2	2,8%
Netherlands	63,0	66,6	5,7%	70,7	6,2%	69,0	-2,4%	71,0	2,9%	76,0	7,0%	80,0	5,3%
Norway	31,6	32,8	3,8%	30,4	-7,3%	29,3	-3,6%	31,7	8,2%	30,2	-4,7%	30,0	-0,7%
Portugal	8,1	11,4	40,7%	14,2	24,6%	17,3	21,8%	14,6	-15,6%	20,4	39,7%	21,0	2,9%
Spain	54,6	64,4	17,9%	78,8	22,4%	85,9	9,0%	85,0	-1,0%	90,0	5,9%	95,0	5,6%
Sweden	64,5	69,3	7,4%	61,6	-11,1%	57,4	-6,8%	60,4	5,2%	62,1	2,8%	64,8	4,3%
Switzerland	50,2	53,2	6,0%	52,5	-1,3%	52,2	-0,6%	52,3	0,2%	51,3	-1,9%	51,2	-0,2%
Western-	1.369,3	1.466,6	7,1%	1.519,5	3,6%	1.439,3	-5,3%	1.440,9	0,1%	1.490,9	3,5%	1.503,5	0,8%
Europe													
			0/		0/		0/		0/		0/		0/
Czech Republic	28,6		18,5%	36,4	7,4%	34,4	-	35,9	4,4%		3,9%	38,6	3,5%
Hungary	14,4	•	22,9%	21,1	,		33,6%	·	-11,3%		-12,0%	28,0	27,3%
Poland	178,3	185,1	,	•	12,0%	237,6	,	240,2	1,1%		-4,7%	227,0	-0,9%
Slovakia	16,9	•	13,0%	20,2	5,8%	21,5	6,4%	22,2	3,3%			21,7	0,5%
Eastern-	238,2	255,8	7,4%	285,1	11,5%	321,7	12,8%	323,3	0,5%	309,9	-4,1%	315,3	1,7%
Europe													
Europe	1.607,5	1.722,4	7,1%	1.804,6	4,8%	1.761,0	-2,4%	1.764,2	0,2%	1.800,8	2,1%	1.818,8	1,0%

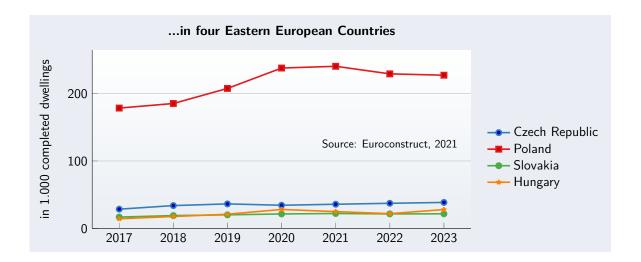
Source: Euroconstruct 2021 - completed units in one-, two and multi-family houses

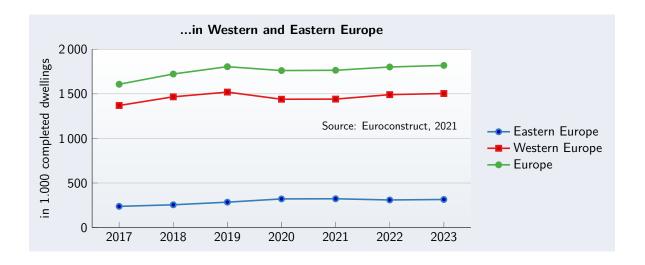






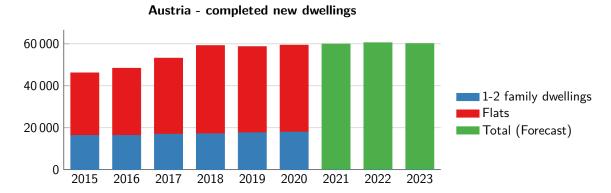




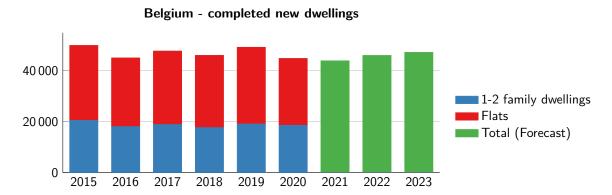


## 2.4 Completed new Dwellings by country 2015 - 2023

In this chapter, we would like to show you, on the basis of existing actual data, how construction completions are distributed per country among 1-2 family houses and among apartment buildings. These data are made available on the Internet by the statistical offices of the respective countries. For the years 2021 to 2023 we fill the graph with Euroconstruct forecast data as the sum of completed housing units.

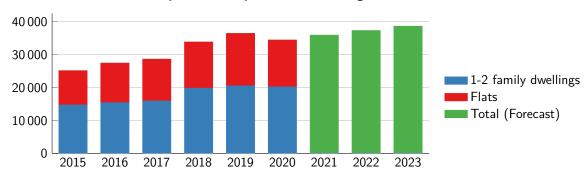


Figures published by the respective national statistic authorities. Forecasts published by Euroconstruct



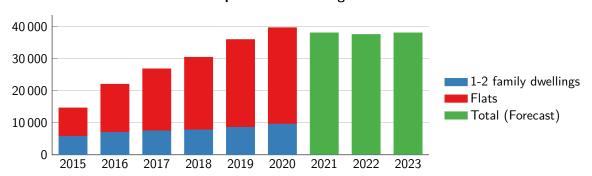
Figures published by the respective national statistic authorities. Forecasts published by Euroconstruct

## Czech Republic - completed new dwellings



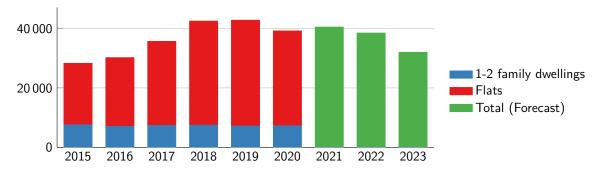
Figures published by the respective national statistic authorities. Forecasts published by Euroconstruct

## Denmark - completed new dwellings



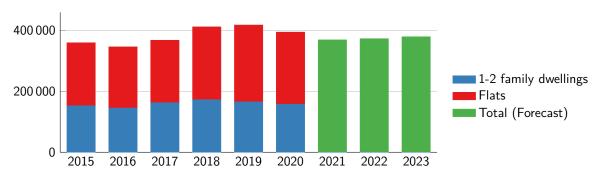
Figures published by the respective national statistic authorities. Forecasts published by Euroconstruct

Finland - completed new dwellings



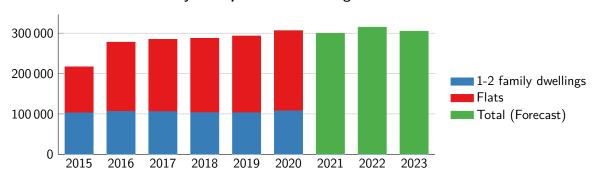
Figures published by the respective national statistic authorities. Forecasts published by Euroconstruct

## France - completed new dwellings



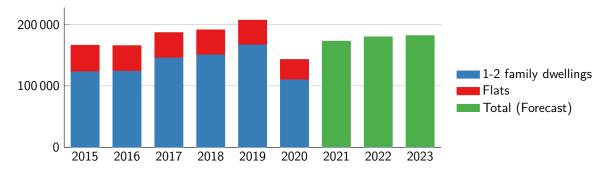
Figures published by the respective national statistic authorities. Forecasts published by Euroconstruct

## Germany - completed new dwellings

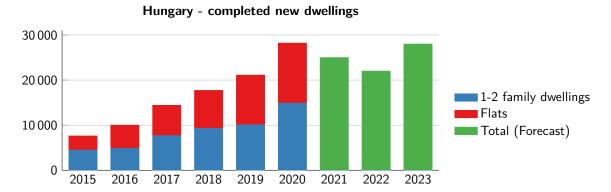


Figures published by the respective national statistic authorities. Forecasts published by Euroconstruct

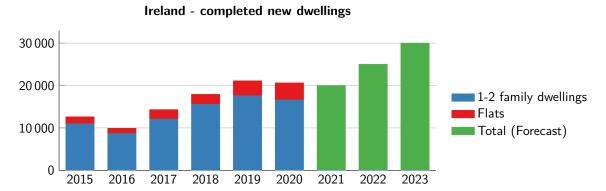
## Great Britain - completed new dwellings



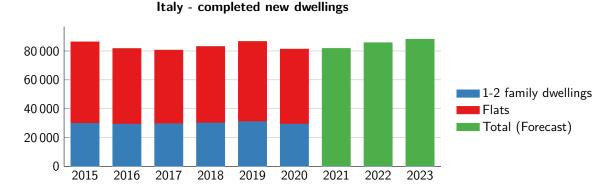
Figures published by the respective national statistic authorities. Forecasts published by Euroconstruct



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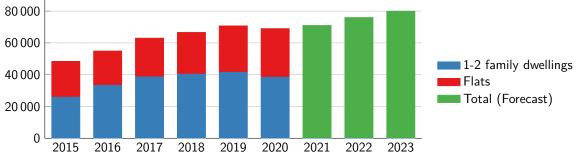


Figures published by the respective national statistic authorities. Forecasts published by Euroconstruct



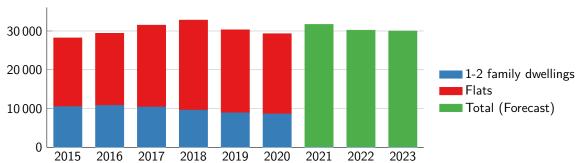
Figures published by the respective national statistic authorities. Forecasts published by Euroconstruct

## Netherlands - completed new dwellings



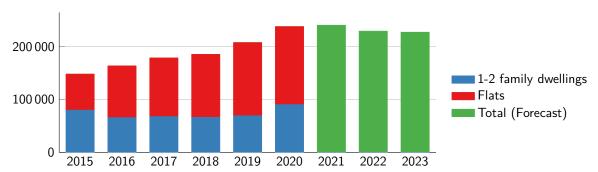
Figures published by the respective national statistic authorities. Forecasts published by Euroconstruct

## Norway - completed new dwellings



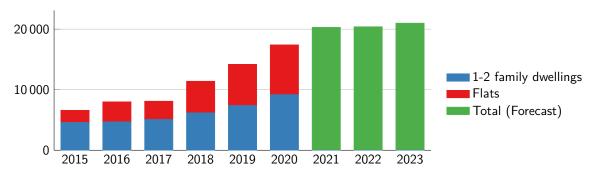
Figures published by the respective national statistic authorities. Forecasts published by Euroconstruct

## Poland - completed new dwellings



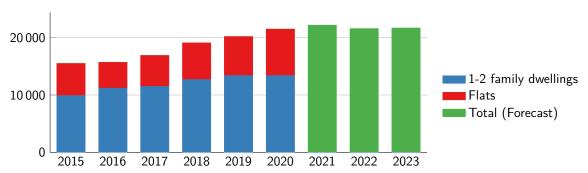
Figures published by the respective national statistic authorities. Forecasts published by Euroconstruct

## Portugal - completed new dwellings



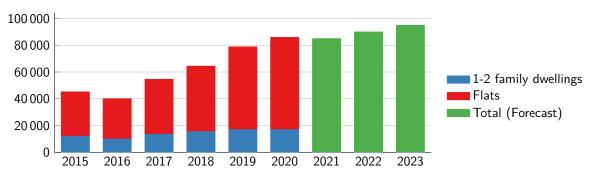
Figures published by the respective national statistic authorities. Forecasts published by Euroconstruct

## Slovakia - completed new dwellings



Figures published by the respective national statistic authorities. Forecasts published by Euroconstruct

## Spain - completed new dwellings



Figures published by the respective national statistic authorities. Forecasts published by Euroconstruct

2015

2016

2017

2018

## Sweden - completed new dwellings 60 000 40 000 20 000 Total (Forecast)

2020

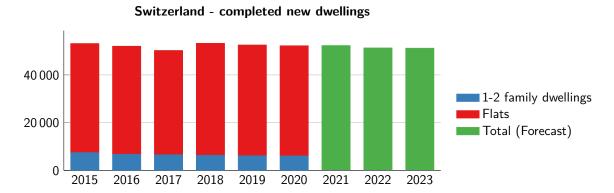
2021

2022

2023

Figures published by the respective national statistic authorities. Forecasts published by Euroconstruct

2019



Figures published by the respective national statistic authorities. Forecasts published by Euroconstruct

## 3 Consumption of Heating & Plumbing Pipes 2019 - 2023

## 3.1 Austria (tables and charts)

Floor Heating / Surface Heating & Cooling - Austria

S	Year	ı	Metal-Pip	oes		Plastic-	Pipes		Multi	To	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	0.00	0.25	0.00	6.21	9.08	0.21	0.39	2.80	0.25	15.89	18.94
_ ≣	2020	0.00	0.26	0.00	6.27	9.27	0.20	0.40	2.83	0.26	16.14	19.23
_	2021	0.00	0.26	0.00	6.49	9.82	0.20	0.42	2.95	0.26	16.93	20.14
	2022	0.00	0.26	0.00	6.69	10.34	0.20	0.43	3.04	0.26	17.66	20.96
ge on Years	2023	0.00	0.27	0.00	6.88	10.85	0.20	0.44	3.16	0.27	18.37	21.80
Change evious Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	_	4.00	_	0.97	2.09	-4.76	2.56	1.07	4.00	1.57	1.53
% C	2021	-	0.00	-	3.51	5.93	0.00	5.00	4.24	0.00	4.89	4.73
۰, <del>۳</del>	2022	_	0.00	-	3.08	5.30	0.00	2.38	3.05	0.00	4.31	4.07
υ	2023	-	3.85	-	2.84	4.93	0.00	2.33	3.95	3.85	4.02	4.01
Share	2019	0.00	1.32	0.00	32.79	47.94	1.11	2.06	14.78	1.32	83.90	100.00
	2020	0.00	1.35	0.00	32.61	48.21	1.04	2.08	14.72	1.35	83.93	100.00
Market	2021	0.00	1.29	0.00	32.22	48.76	0.99	2.09	14.65	1.29	84.06	100.00
	2022	0.00	1.24	0.00	31.92	49.33	0.95	2.05	14.50	1.24	84.26	100.00
%	2023	0.00	1.24	0.00	31.56	49.77	0.92	2.02	14.50	1.24	84.27	100.00

## Radiator Connection - Austria

S	Year	1	Metal-Pip	es		Plastic-	Pipes		Multi	To	otals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	0.73	2.85	0.00	0.88	0.21	0.00	0.19	3.62	3.58	1.28	8.48
_ ≣	2020	0.73	2.86	0.00	0.88	0.21	0.00	0.19	3.64	3.59	1.28	8.51
_	2021	0.73	2.89	0.00	0.89	0.21	0.00	0.19	3.80	3.62	1.29	8.71
	2022	0.74	2.93	0.00	0.90	0.21	0.00	0.19	3.86	3.67	1.30	8.83
on ears	2023	0.74	2.96	0.00	0.90	0.21	0.00	0.19	3.90	3.70	1.30	8.90
监	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	0.00	0.35	_	0.00	0.00	_	0.00	0.55	0.28	0.00	0.35
% C	2021	0.00	1.05	-	1.14	0.00	-	0.00	4.40	0.84	0.78	2.35
۰, <del>Մ</del>	2022	1.37	1.38	_	1.12	0.00	_	0.00	1.58	1.38	0.78	1.38
Φ	2023	0.00	1.02	-	0.00	0.00	-	0.00	1.04	0.82	0.00	0.79
Share	2019	8.61	33.61	0.00	10.38	2.48	0.00	2.24	42.69	42.22	15.09	100.00
5	2020	8.58	33.61	0.00	10.34	2.47	0.00	2.23	42.77	42.19	15.04	100.00
Market	2021	8.38	33.18	0.00	10.22	2.41	0.00	2.18	43.63	41.56	14.81	100.00
	2022	8.38	33.18	0.00	10.19	2.38	0.00	2.15	43.71	41.56	14.72	100.00
%	2023	8.31	33.26	0.00	10.11	2.36	0.00	2.13	43.82	41.57	14.61	100.00

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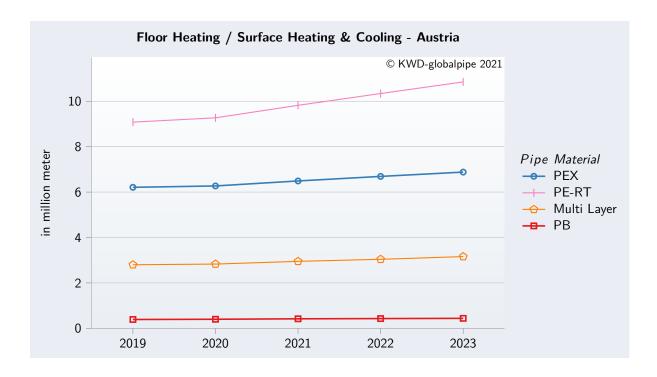
## Sanitary / Hot & Cold Water Systems - Austria

SIS	Year		Metal-Pip	es		Plastic-	Pipes		Multi	To	otals	Total
ss in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
	2019	0.00	3.93	0.35	0.97	0.78	1.84	0.26	5.80	4.28	3.85	13.93
Pipe Million	2020	0.00	4.00	0.36	0.98	0.79	1.86	0.26	5.91	4.36	3.89	14.16
_	2021	0.00	4.10	0.37	1.00	0.80	1.92	0.27	6.06	4.47	3.99	14.52
	2022	0.00	4.20	0.38	1.02	0.81	1.96	0.27	6.21	4.58	4.06	14.85
ge on Years	2023	0.00	4.25	0.38	1.03	0.82	1.99	0.27	6.29	4.63	4.11	15.03
Change evious Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	_	1.78	2.86	1.03	1.28	1.09	0.00	1.90	1.87	1.04	1.65
% C	2021	_	2.50	2.78	2.04	1.27	3.23	3.85	2.54	2.52	2.57	2.54
۰, <del>۳</del>	2022	_	2.44	2.70	2.00	1.25	2.08	0.00	2.48	2.46	1.75	2.27
Φ	2023	-	1.19	0.00	0.98	1.23	1.53	0.00	1.29	1.09	1.23	1.21
Share	2019	0.00	28.21	2.51	6.96	5.60	13.21	1.87	41.64	30.73	27.64	100.00
	2020	0.00	28.25	2.54	6.92	5.58	13.14	1.84	41.74	30.79	27.47	100.00
Market	2021	0.00	28.24	2.55	6.89	5.51	13.22	1.86	41.74	30.79	27.48	100.00
	2022	0.00	28.28	2.56	6.87	5.45	13.20	1.82	41.82	30.84	27.34	100.00
%	2023	0.00	28.28	2.53	6.85	5.46	13.24	1.80	41.85	30.81	27.35	100.00

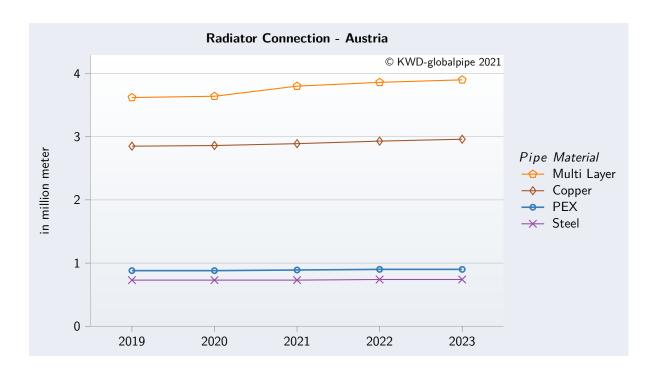
## Heating & Plumbing Pipes - Austria

STS	Year		Metal-Pip	es		Plastic-	Pipes		Multi	To	otals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	0.73	7.03	0.35	8.06	10.07	2.05	0.84	12.22	8.11	21.02	41.35
_ ≣	2020	0.73	7.12	0.36	8.13	10.27	2.06	0.85	12.38	8.21	21.31	41.90
_	2021	0.73	7.25	0.37	8.38	10.83	2.12	0.88	12.81	8.35	22.21	43.37
	2022	0.74	7.39	0.38	8.61	11.36	2.16	0.89	13.11	8.51	23.02	44.64
on ears	2023	0.74	7.48	0.38	8.81	11.88	2.19	0.90	13.35	8.60	23.78	45.73
监	2019	_	_	_	_	_	_	_	_	_	_	_
ha. iou	2020	0.00	1.28	2.86	0.87	1.99	0.49	1.19	1.31	1.23	1.38	1.33
% Chang Previous	2021	0.00	1.83	2.78	3.08	5.45	2.91	3.53	3.47	1.71	4.22	3.51
o, Ф	2022	1.37	1.93	2.70	2.74	4.89	1.89	1.14	2.34	1.92	3.65	2.93
Φ	2023	0.00	1.22	0.00	2.32	4.58	1.39	1.12	1.83	1.06	3.30	2.44
Share	2019	1.77	17.00	0.85	19.49	24.35	4.96	2.03	29.55	19.61	50.83	100.00
늉	2020	1.74	16.99	0.86	19.40	24.51	4.92	2.03	29.55	19.59	50.86	100.00
Market	2021	1.68	16.72	0.85	19.32	24.97	4.89	2.03	29.54	19.25	51.21	100.00
	2022	1.66	16.55	0.85	19.29	25.45	4.84	1.99	29.37	19.06	51.57	100.00
%	2023	1.62	16.36	0.83	19.27	25.98	4.79	1.97	29.19	18.81	52.00	100.00

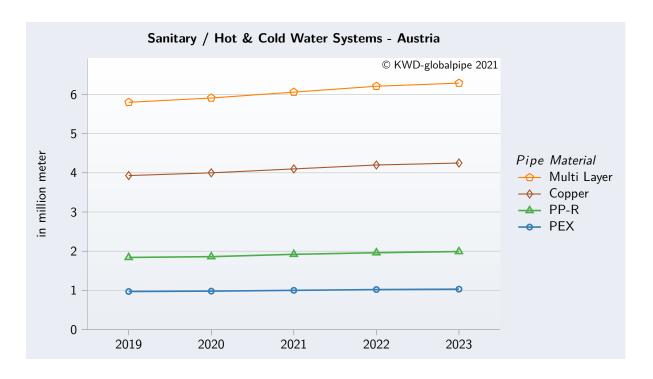
## Floor Heating / Surface Heating & Cooling - Austria



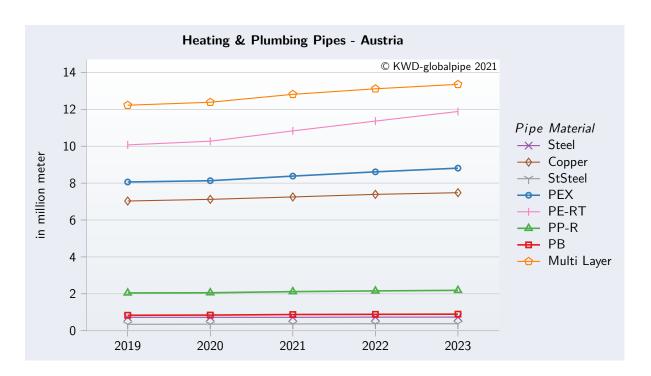
## Radiator Connection - Austria



## Sanitary / Hot & Cold Water Systems - Austria



Heating & Plumbing Pipes - Austria



## 3.2 Belgium (tables and charts)

## Floor Heating / Surface Heating & Cooling - Belgium

S.	Year	1	Metal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
	2019	0.00	0.19	0.00	5.61	5.05	0.00	0.00	3.12	0.19	10.66	13.97
Pipe Million	2020	0.00	0.19	0.00	5.67	5.05	0.00	0.00	3.08	0.19	10.72	13.99
_	2021	0.00	0.20	0.00	5.93	5.20	0.00	0.00	3.07	0.20	11.13	14.40
	2022	0.00	0.20	0.00	6.24	5.45	0.00	0.00	3.12	0.20	11.69	15.01
ge on Years	2023	0.00	0.21	0.00	6.64	5.77	0.00	0.00	3.23	0.21	12.41	15.85
Change vious Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	_	0.00	_	1.07	0.00	_	_	-1.28	0.00	0.56	0.14
% C	2021	-	5.26	-	4.59	2.97	-	-	-0.32	5.26	3.82	2.93
o, T	2022	_	0.00	_	5.23	4.81	_	_	1.63	0.00	5.03	4.24
Φ	2023	-	5.00	-	6.41	5.87	-	-	3.53	5.00	6.16	5.60
Share	2019	0.00	1.36	0.00	40.16	36.15	0.00	0.00	22.33	1.36	76.31	100.00
	2020	0.00	1.36	0.00	40.53	36.10	0.00	0.00	22.02	1.36	76.63	100.00
Market	2021	0.00	1.39	0.00	41.18	36.11	0.00	0.00	21.32	1.39	77.29	100.00
	2022	0.00	1.33	0.00	41.57	36.31	0.00	0.00	20.79	1.33	77.88	100.00
%	2023	0.00	1.32	0.00	41.89	36.40	0.00	0.00	20.38	1.32	78.30	100.00

## Radiator Connection - Belgium

SIS	Year	N	/letal-Pip	es		Plastic-l	Pipes		Multi	То	tals	Total
Pipes in Iion Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipe Million	2019	1.02	1.59	0.00	0.77	0.26	0.00	0.00	5.67	2.61	1.03	9.31
≣	2020	0.94	1.47	0.00	0.70	0.24	0.00	0.00	5.26	2.41	0.94	8.61
_	2021	0.90	1.41	0.00	0.66	0.22	0.00	0.00	5.05	2.31	0.88	8.24
	2022	0.89	1.40	0.00	0.64	0.21	0.00	0.00	5.00	2.29	0.85	8.14
ge on Years	2023	0.89	1.40	0.00	0.63	0.20	0.00	0.00	5.00	2.29	0.83	8.12
Change vious Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	-7.84	-7.55	-	-9.09	-7.69	_	-	-7.23	-7.66	-8.74	-7.52
% C	2021	-4.26	-4.08	-	-5.71	-8.33	-	-	-3.99	-4.15	-6.38	-4.30
۰, <del>۲</del>	2022	-1.11	-0.71	_	-3.03	-4.55	_	-	-0.99	-0.87	-3.41	-1.21
υ	2023	0.00	0.00	-	-1.56	-4.76	-	-	0.00	0.00	-2.35	-0.25
Share	2019	10.96	17.08	0.00	8.27	2.79	0.00	0.00	60.90	28.03	11.06	100.00
# 57	2020	10.92	17.07	0.00	8.13	2.79	0.00	0.00	61.09	27.99	10.92	100.00
Market	2021	10.92	17.11	0.00	8.01	2.67	0.00	0.00	61.29	28.03	10.68	100.00
	2022	10.93	17.20	0.00	7.86	2.58	0.00	0.00	61.43	28.13	10.44	100.00
%	2023	10.96	17.24	0.00	7.76	2.46	0.00	0.00	61.58	28.20	10.22	100.00

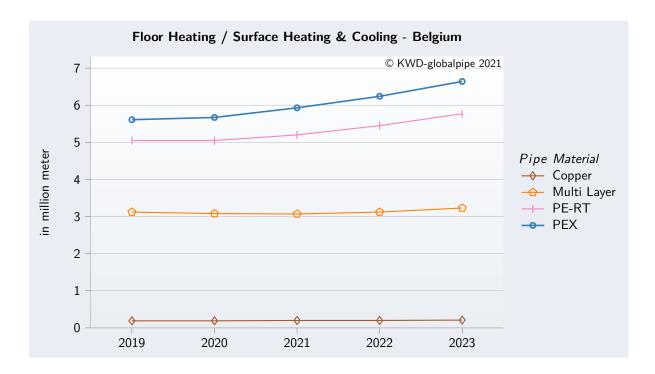
## Sanitary / Hot & Cold Water Systems - Belgium

S.	Year	1	Metal-Pip	es		Plastic-	Pipes		Multi	То	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	0.00	2.79	0.47	0.79	0.64	0.00	0.00	9.50	3.26	1.43	14.19
_ ≣	2020	0.00	2.67	0.45	0.75	0.61	0.00	0.00	9.08	3.12	1.36	13.56
_	2021	0.00	2.64	0.44	0.74	0.60	0.00	0.00	8.96	3.08	1.34	13.38
	2022	0.00	2.69	0.45	0.75	0.61	0.00	0.00	9.13	3.14	1.36	13.63
ge on Years	2023	0.00	2.74	0.46	0.76	0.62	0.00	0.00	9.29	3.20	1.38	13.87
Change evious Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	_	-4.30	-4.26	-5.06	-4.69	_	_	-4.42	-4.29	-4.90	-4.44
% C	2021	-	-1.12	-2.22	-1.33	-1.64	-	-	-1.32	-1.28	-1.47	-1.33
∘∕ ₾	2022	_	1.89	2.27	1.35	1.67	_	-	1.90	1.95	1.49	1.87
Φ	2023	-	1.86	2.22	1.33	1.64	-	-	1.75	1.91	1.47	1.76
Share	2019	0.00	19.66	3.31	5.57	4.51	0.00	0.00	66.95	22.97	10.08	100.00
	2020	0.00	19.69	3.32	5.53	4.50	0.00	0.00	66.96	23.01	10.03	100.00
Market	2021	0.00	19.73	3.29	5.53	4.48	0.00	0.00	66.97	23.02	10.01	100.00
	2022	0.00	19.74	3.30	5.50	4.48	0.00	0.00	66.98	23.04	9.98	100.00
%	2023	0.00	19.75	3.32	5.48	4.47	0.00	0.00	66.98	23.07	9.95	100.00

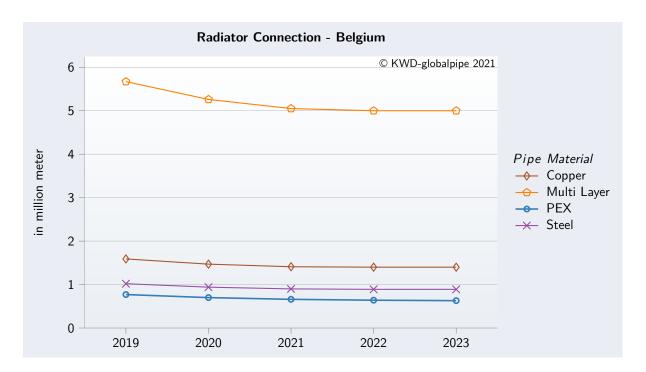
## Heating & Plumbing Pipes - Belgium

S	Year	N	∕letal-Pip	es		Plastic-l	Pipes		Multi	To	tals	Total
es in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	1.02	4.57	0.47	7.17	5.95	0.00	0.00	18.29	6.06	13.12	37.47
_ ≣	2020	0.94	4.33	0.45	7.12	5.90	0.00	0.00	17.42	5.72	13.02	36.16
_	2021	0.90	4.25	0.44	7.33	6.02	0.00	0.00	17.08	5.59	13.35	36.02
	2022	0.89	4.29	0.45	7.63	6.27	0.00	0.00	17.25	5.63	13.90	36.78
ge on Years	2023	0.89	4.35	0.46	8.03	6.59	0.00	0.00	17.52	5.70	14.62	37.84
Change vious Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	-7.84	-5.25	-4.26	-0.70	-0.84	-	-	-4.76	-5.61	-0.76	-3.50
% C	2021	-4.26	-1.85	-2.22	2.95	2.03	-	-	-1.95	-2.27	2.53	-0.39
۰, <del>۳</del>	2022	-1.11	0.94	2.27	4.09	4.15	_	_	1.00	0.72	4.12	2.11
υ	2023	0.00	1.40	2.22	5.24	5.10	-	-	1.57	1.24	5.18	2.88
Share	2019	2.72	12.20	1.25	19.14	15.88	0.00	0.00	48.81	16.17	35.01	100.00
	2020	2.60	11.97	1.24	19.69	16.32	0.00	0.00	48.17	15.82	36.01	100.00
Market	2021	2.50	11.80	1.22	20.35	16.71	0.00	0.00	47.42	15.52	37.06	100.00
	2022	2.42	11.66	1.22	20.74	17.05	0.00	0.00	46.90	15.31	37.79	100.00
%	2023	2.35	11.50	1.22	21.22	17.42	0.00	0.00	46.30	15.06	38.64	100.00

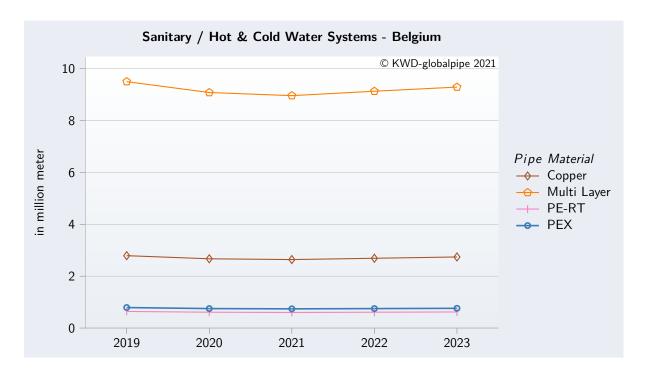
## Floor Heating / Surface Heating & Cooling - Belgium



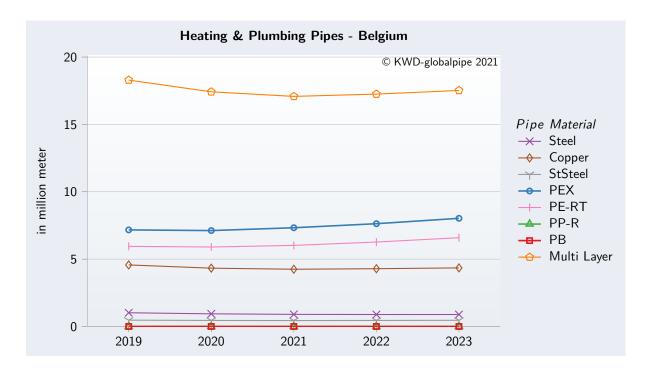
## Radiator Connection - Belgium



## Sanitary / Hot & Cold Water Systems - Belgium



## Heating & Plumbing Pipes - Belgium



## 3.3 Czech Republic (tables and charts)

## Floor Heating / Surface Heating & Cooling - Czech Republic

S.	Year	1	Metal-Pip	es		Plastic-	-Pipes		Multi	To	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
	2019	0.00	0.18	0.00	1.24	1.53	0.03	0.03	1.14	0.18	2.83	4.15
Pipe Million	2020	0.00	0.18	0.00	1.27	1.57	0.03	0.03	1.14	0.18	2.90	4.22
_	2021	0.00	0.19	0.00	1.36	1.69	0.03	0.03	1.20	0.19	3.11	4.50
	2022	0.00	0.20	0.00	1.48	1.84	0.04	0.04	1.26	0.20	3.40	4.86
ge on Years	2023	0.00	0.21	0.00	1.60	1.99	0.04	0.04	1.31	0.21	3.67	5.19
Change vious Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	_	0.00	_	2.42	2.61	0.00	0.00	0.00	0.00	2.47	1.69
% C	2021	-	5.56	-	7.09	7.64	0.00	0.00	5.26	5.56	7.24	6.64
o,	2022	_	5.26	-	8.82	8.88	33.33	33.33	5.00	5.26	9.32	8.00
Φ	2023	-	5.00	-	8.11	8.15	0.00	0.00	3.97	5.00	7.94	6.79
Share	2019	0.00	4.34	0.00	29.88	36.87	0.72	0.72	27.47	4.34	68.19	100.00
Market	2020	0.00	4.27	0.00	30.09	37.20	0.71	0.71	27.01	4.27	68.72	100.00
	2021	0.00	4.22	0.00	30.22	37.56	0.67	0.67	26.67	4.22	69.11	100.00
	2022	0.00	4.12	0.00	30.45	37.86	0.82	0.82	25.93	4.12	69.96	100.00
%	2023	0.00	4.05	0.00	30.83	38.34	0.77	0.77	25.24	4.05	70.71	100.00

## Radiator Connection - Czech Republic

S	Year	N	∕letal-Pip	es		Plastic	-Pipes		Multi	То	tals	Total
Pipes in ion Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
ope ion	2019	0.77	4.63	0.00	0.60	0.27	0.09	0.28	1.74	5.40	1.24	8.38
Pipe Million	2020	0.73	4.34	0.00	0.56	0.25	0.08	0.26	1.64	5.07	1.15	7.86
	2021	0.73	4.34	0.00	0.56	0.25	0.08	0.26	1.65	5.07	1.15	7.87
	2022	0.75	4.46	0.00	0.57	0.26	0.08	0.27	1.70	5.21	1.18	8.09
ge on Years	2023	0.77	4.59	0.00	0.59	0.26	0.08	0.27	1.76	5.36	1.20	8.32
Change vious Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	-5.19	-6.26	-	-6.67	-7.41	-11.11	-7.14	-5.75	-6.11	-7.26	-6.21
% C	2021	0.00	0.00	-	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.13
٥, ٣	2022	2.74	2.76	_	1.79	4.00	0.00	3.85	3.03	2.76	2.61	2.80
υ	2023	2.67	2.91	-	3.51	0.00	0.00	0.00	3.53	2.88	1.69	2.84
Share	2019	9.19	55.25	0.00	7.16	3.22	1.07	3.34	20.76	64.44	14.80	100.00
<del>1</del>	2020	9.29	55.22	0.00	7.12	3.18	1.02	3.31	20.87	64.50	14.63	100.00
Market	2021	9.28	55.15	0.00	7.12	3.18	1.02	3.30	20.97	64.42	14.61	100.00
	2022	9.27	55.13	0.00	7.05	3.21	0.99	3.34	21.01	64.40	14.59	100.00
%	2023	9.25	55.17	0.00	7.09	3.12	0.96	3.25	21.15	64.42	14.42	100.00

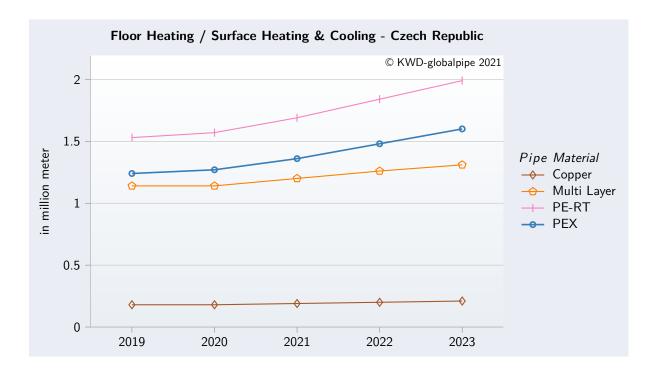
## Sanitary / Hot & Cold Water Systems - Czech Republic

S.	Year	N	∕letal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	0.79	1.59	0.01	0.87	0.84	2.74	0.08	1.09	2.39	4.53	8.01
_ ≣	2020	0.73	1.51	0.01	0.84	0.80	2.60	0.08	1.04	2.25	4.32	7.61
	2021	0.73	1.53	0.01	0.85	0.81	2.64	0.08	1.05	2.27	4.38	7.70
	2022	0.73	1.57	0.01	0.89	0.84	2.74	0.08	1.09	2.31	4.55	7.95
ge on Years	2023	0.73	1.63	0.02	0.92	0.87	2.83	0.09	1.12	2.38	4.71	8.21
Change vious Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	-7.59	-5.03	0.00	-3.45	-4.76	-5.11	0.00	-4.59	-5.86	-4.64	-4.99
% C	2021	0.00	1.32	0.00	1.19	1.25	1.54	0.00	0.96	0.89	1.39	1.18
o, T	2022	0.00	2.61	0.00	4.71	3.70	3.79	0.00	3.81	1.76	3.88	3.25
Φ	2023	0.00	3.82	100.00	3.37	3.57	3.28	12.50	2.75	3.03	3.52	3.27
Share	2019	9.86	19.85	0.12	10.86	10.49	34.21	1.00	13.61	29.84	56.55	100.00
	2020	9.59	19.84	0.13	11.04	10.51	34.17	1.05	13.67	29.57	56.77	100.00
Market	2021	9.48	19.87	0.13	11.04	10.52	34.29	1.04	13.64	29.48	56.88	100.00
	2022	9.18	19.75	0.13	11.19	10.57	34.47	1.01	13.71	29.06	57.23	100.00
%	2023	8.89	19.85	0.24	11.21	10.60	34.47	1.10	13.64	28.99	57.37	100.00

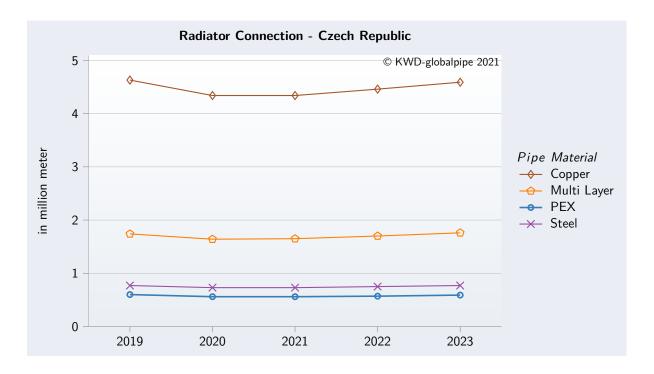
## Heating & Plumbing Pipes - Czech Republic

S	Year	N	∕letal-Pip	es		Plastic	-Pipes		Multi	Totals		Total
Pipes in Million Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
<sup>2</sup> ipe ion	2019	1.56	6.40	0.01	2.71	2.64	2.86	0.39	3.97	7.97	8.60	20.54
	2020	1.46	6.03	0.01	2.67	2.62	2.71	0.37	3.82	7.50	8.37	19.69
	2021	1.46	6.06	0.01	2.77	2.75	2.75	0.37	3.90	7.53	8.64	20.07
	2022	1.48	6.23	0.01	2.94	2.94	2.86	0.39	4.05	7.72	9.13	20.90
ge on Years	2023	1.50	6.43	0.02	3.11	3.12	2.95	0.40	4.19	7.95	9.58	21.72
Change vious Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous`	2020	-6.41	-5.78	0.00	-1.48	-0.76	-5.24	-5.13	-3.78	-5.90	-2.67	-4.14
o o	2021	0.00	0.50	0.00	3.75	4.96	1.48	0.00	2.09	0.40	3.23	1.93
o, Ф	2022	1.37	2.81	0.00	6.14	6.91	4.00	5.41	3.85	2.52	5.67	4.14
Φ	2023	1.35	3.21	100.00	5.78	6.12	3.15	2.56	3.46	2.98	4.93	3.92
Share	2019	7.59	31.16	0.05	13.19	12.85	13.92	1.90	19.33	38.80	41.87	100.00
	2020	7.41	30.62	0.05	13.56	13.31	13.76	1.88	19.40	38.09	42.51	100.00
Market	2021	7.27	30.19	0.05	13.80	13.70	13.70	1.84	19.43	37.52	43.05	100.00
	2022	7.08	29.81	0.05	14.07	14.07	13.68	1.87	19.38	36.94	43.68	100.00
%	2023	6.91	29.60	0.09	14.32	14.36	13.58	1.84	19.29	36.60	44.11	100.00

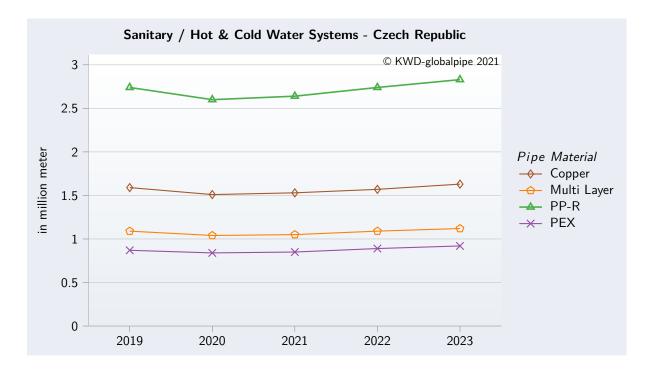
## Floor Heating / Surface Heating & Cooling - Czech Republic



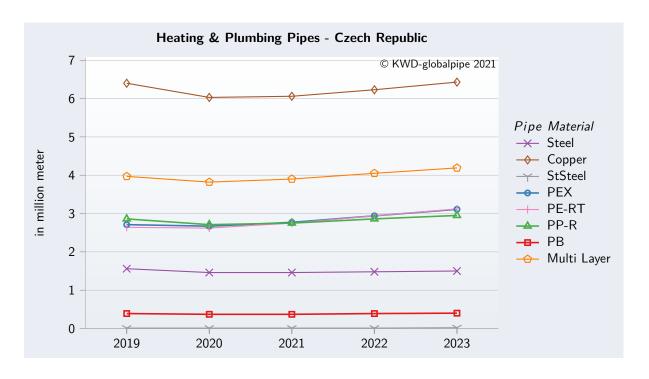
## Radiator Connection - Czech Republic



## Sanitary / Hot & Cold Water Systems - Czech Republic



## Heating & Plumbing Pipes - Czech Republic



## 3.4 Denmark (tables and charts)

## Floor Heating / Surface Heating & Cooling - Denmark

S .	Year	1	Metal-Pip	es		Plastic-	Pipes		Multi	To	otals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
	2019	0.00	0.00	0.00	5.12	2.57	0.00	0.00	1.89	0.00	7.69	9.58
Pipe Million	2020	0.00	0.00	0.00	5.86	2.94	0.00	0.00	2.16	0.00	8.80	10.96
_	2021	0.00	0.00	0.00	6.14	3.08	0.00	0.00	2.26	0.00	9.22	11.48
	2022	0.00	0.00	0.00	6.40	3.22	0.00	0.00	2.36	0.00	9.62	11.98
on ears	2023	0.00	0.00	0.00	6.52	3.28	0.00	0.00	2.41	0.00	9.80	12.21
Ψ. >-	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	_	_	_	14.45	14.40	_	_	14.29	_	14.43	14.41
o o	2021	-	-	-	4.78	4.76	-	-	4.63	-	4.77	4.74
o, U	2022	_	_	_	4.23	4.55	_	_	4.42	_	4.34	4.36
υ U	2023	-	-	-	1.87	1.86	-	-	2.12	_	1.87	1.92
Share	2019	0.00	0.00	0.00	53.44	26.83	0.00	0.00	19.73	0.00	80.27	100.00
Market	2020	0.00	0.00	0.00	53.47	26.82	0.00	0.00	19.71	0.00	80.29	100.00
	2021	0.00	0.00	0.00	53.48	26.83	0.00	0.00	19.69	0.00	80.31	100.00
	2022	0.00	0.00	0.00	53.42	26.88	0.00	0.00	19.70	0.00	80.30	100.00
%	2023	0.00	0.00	0.00	53.40	26.86	0.00	0.00	19.74	0.00	80.26	100.00

## **Radiator Connection - Denmark**

STS	Year	N	/letal-Pip	es		Plastic-l	Pipes		Multi	To	tals	Total
ss in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes in Million Met	2019	1.51	0.96	0.00	0.79	0.14	0.00	0.00	2.56	2.47	0.93	5.96
_ ≣	2020	1.66	1.06	0.00	0.87	0.15	0.00	0.00	2.82	2.72	1.02	6.56
_	2021	1.56	1.00	0.00	0.82	0.14	0.00	0.00	2.67	2.56	0.96	6.19
	2022	1.56	1.00	0.00	0.82	0.14	0.00	0.00	2.68	2.56	0.96	6.20
ge on Years	2023	1.47	0.94	0.00	0.78	0.14	0.00	0.00	2.53	2.41	0.92	5.86
Change vious Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	9.93	10.42	-	10.13	7.14	_	-	10.16	10.12	9.68	10.07
% C	2021	-6.02	-5.66	-	-5.75	-6.67	-	-	-5.32	-5.88	-5.88	-5.64
o, Ф	2022	0.00	0.00	_	0.00	0.00	_	_	0.37	0.00	0.00	0.16
Φ	2023	-5.77	-6.00	-	-4.88	0.00	-	-	-5.60	-5.86	-4.17	-5.48
Share	2019	25.34	16.11	0.00	13.26	2.35	0.00	0.00	42.95	41.44	15.60	100.00
% Market S	2020	25.30	16.16	0.00	13.26	2.29	0.00	0.00	42.99	41.46	15.55	100.00
	2021	25.20	16.16	0.00	13.25	2.26	0.00	0.00	43.13	41.36	15.51	100.00
	2022	25.16	16.13	0.00	13.23	2.26	0.00	0.00	43.23	41.29	15.48	100.00
	2023	25.09	16.04	0.00	13.31	2.39	0.00	0.00	43.17	41.13	15.70	100.00

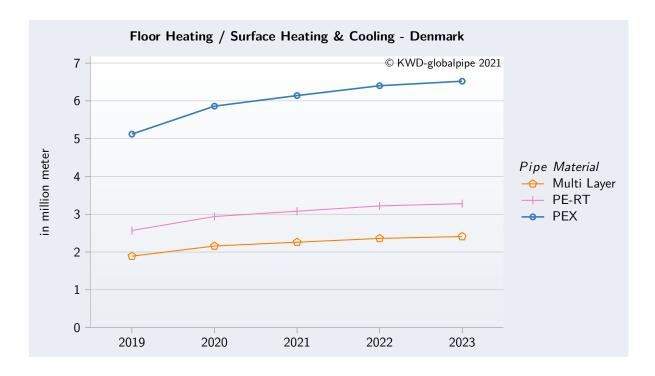
## Sanitary / Hot & Cold Water Systems - Denmark

S	Year	N	1etal-Pipe	es		Plastic-	Pipes		Multi	To	tals	Total
Pipes in Iion Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
<sup>S</sup> ipe ion	2019	0.49	0.50	0.59	2.92	0.30	0.00	0.06	3.18	1.58	3.28	8.04
Ξ	2020	0.44	0.45	0.67	3.31	0.34	0.00	0.07	3.57	1.56	3.72	8.85
	2021	0.39	0.40	0.66	3.27	0.33	0.00	0.07	3.50	1.45	3.67	8.62
	2022	0.35	0.36	0.67	3.35	0.34	0.00	0.07	3.55	1.38	3.76	8.69
ge on Years	2023	0.30	0.31	0.66	3.34	0.34	0.00	0.07	3.53	1.27	3.75	8.55
	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	-10.20	-10.00	13.56	13.36	13.33	_	16.67	12.26	-1.27	13.41	10.07
% C	2021	-11.36	-11.11	-1.49	-1.21	-2.94	-	0.00	-1.96	-7.05	-1.34	-2.60
۰, <del>۳</del>	2022	-10.26	-10.00	1.52	2.45	3.03	_	0.00	1.43	-4.83	2.45	0.81
υ	2023	-14.29	-13.89	-1.49	-0.30	0.00	-	0.00	-0.56	-7.97	-0.27	-1.61
Share	2019	6.09	6.22	7.34	36.32	3.73	0.00	0.75	39.55	19.65	40.80	100.00
Market	2020	4.97	5.08	7.57	37.40	3.84	0.00	0.79	40.34	17.63	42.03	100.00
	2021	4.52	4.64	7.66	37.94	3.83	0.00	0.81	40.60	16.82	42.58	100.00
	2022	4.03	4.14	7.71	38.55	3.91	0.00	0.81	40.85	15.88	43.27	100.00
%	2023	3.51	3.63	7.72	39.06	3.98	0.00	0.82	41.29	14.85	43.86	100.00

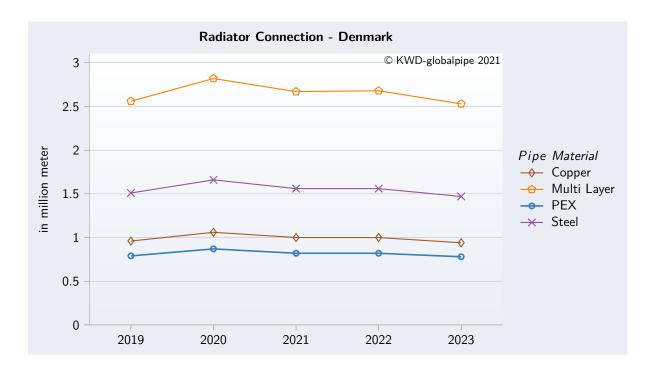
## **Heating & Plumbing Pipes - Denmark**

STS	Year	N	∕letal-Pip	es		Plastic-	Pipes		Multi	То	tals	Total
es in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Iion M	2019	2.00	1.46	0.59	8.83	3.01	0.00	0.06	7.63	4.05	11.90	23.58
Pipe Million	2020	2.10	1.51	0.67	10.04	3.43	0.00	0.07	8.55	4.28	13.54	26.37
	2021	1.95	1.40	0.66	10.23	3.55	0.00	0.07	8.43	4.01	13.85	26.29
	2022	1.91	1.36	0.67	10.57	3.70	0.00	0.07	8.59	3.94	14.34	26.87
ge on Years	2023	1.77	1.25	0.66	10.64	3.76	0.00	0.07	8.47	3.68	14.47	26.62
Change vious Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	5.00	3.42	13.56	13.70	13.95	_	16.67	12.06	5.68	13.78	11.83
% C	2021	-7.14	-7.28	-1.49	1.89	3.50	-	0.00	-1.40	-6.31	2.29	-0.30
o, Ф	2022	-2.05	-2.86	1.52	3.32	4.23	_	0.00	1.90	-1.75	3.54	2.21
Φ	2023	-7.33	-8.09	-1.49	0.66	1.62	-	0.00	-1.40	-6.60	0.91	-0.93
Share	2019	8.48	6.19	2.50	37.45	12.77	0.00	0.25	32.36	17.18	50.47	100.00
#	2020	7.96	5.73	2.54	38.07	13.01	0.00	0.27	32.42	16.23	51.35	100.00
Market	2021	7.42	5.33	2.51	38.91	13.50	0.00	0.27	32.07	15.25	52.68	100.00
	2022	7.11	5.06	2.49	39.34	13.77	0.00	0.26	31.97	14.66	53.37	100.00
%	2023	6.65	4.70	2.48	39.97	14.12	0.00	0.26	31.82	13.82	54.36	100.00

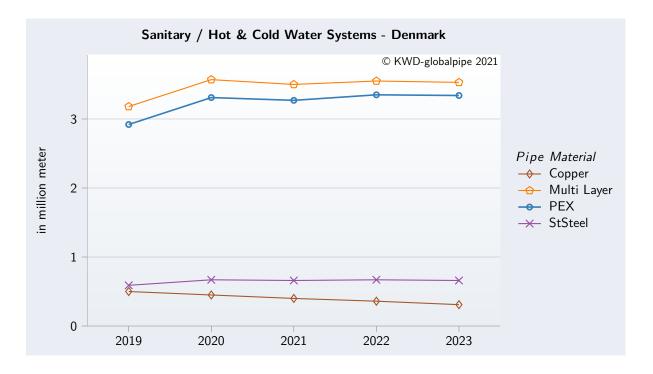
## Floor Heating / Surface Heating & Cooling - Denmark



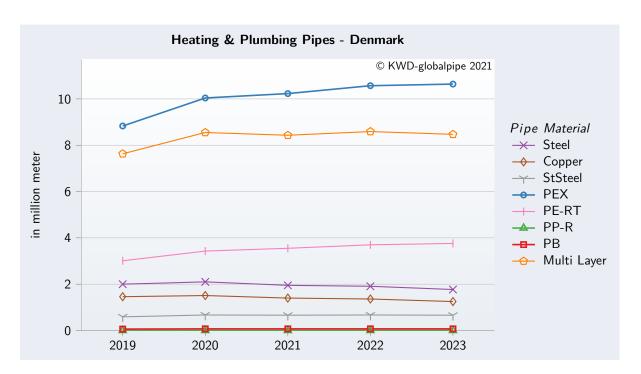
## Radiator Connection - Denmark



## Sanitary / Hot & Cold Water Systems - Denmark



#### **Heating & Plumbing Pipes - Denmark**



# 3.5 Finland (tables and charts)

# Floor Heating / Surface Heating & Cooling - Finland

S.	Year	1	Metal-Pip	es		Plastic-l	Pipes		Multi	To	tals	Total
Pipes in ion Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
	2019	0.00	0.06	0.00	5.53	1.04	0.00	0.00	1.59	0.06	6.57	8.22
Pipe Million	2020	0.00	0.07	0.00	5.69	1.07	0.00	0.00	1.64	0.07	6.76	8.47
~	2021	0.00	0.07	0.00	5.79	1.09	0.00	0.00	1.67	0.07	6.88	8.62
	2022	0.00	0.07	0.00	5.96	1.12	0.00	0.00	1.72	0.07	7.08	8.87
ge on Years	2023	0.00	0.07	0.00	5.83	1.10	0.00	0.00	1.68	0.07	6.93	8.68
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	16.67	_	2.89	2.88	_	_	3.14	16.67	2.89	3.04
	2021	_	0.00	_	1.76	1.87	-	-	1.83	0.00	1.78	1.77
o, T	2022	_	0.00	_	2.94	2.75	_	_	2.99	0.00	2.91	2.90
Φ	2023	-	0.00	-	-2.18	-1.79	-	-	-2.33	0.00	-2.12	-2.14
Share	2019	0.00	0.73	0.00	67.27	12.65	0.00	0.00	19.34	0.73	79.93	100.00
Market Sh	2020	0.00	0.83	0.00	67.18	12.63	0.00	0.00	19.36	0.83	79.81	100.00
	2021	0.00	0.81	0.00	67.17	12.65	0.00	0.00	19.37	0.81	79.81	100.00
	2022	0.00	0.79	0.00	67.19	12.63	0.00	0.00	19.39	0.79	79.82	100.00
%	2023	0.00	0.81	0.00	67.17	12.67	0.00	0.00	19.35	0.81	79.84	100.00

#### **Radiator Connection - Finland**

STS	Year	N	/letal-Pip	es		Plastic-F	Pipes		Multi	То	tals	Total
Pipes in lion Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipe Million	2019	2.44	1.60	0.00	0.99	0.05	0.00	0.00	1.15	4.04	1.04	6.23
_ ≣	2020	2.32	1.53	0.00	0.94	0.05	0.00	0.00	1.10	3.85	0.99	5.94
_	2021	2.33	1.54	0.00	0.94	0.05	0.00	0.00	1.10	3.87	0.99	5.96
	2022	2.29	1.51	0.00	0.93	0.05	0.00	0.00	1.09	3.80	0.98	5.87
ge on Years	2023	2.08	1.37	0.00	0.84	0.04	0.00	0.00	0.99	3.45	0.88	5.32
% Change o	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-4.92	-4.38	-	-5.05	0.00	-	-	-4.35	-4.70	-4.81	-4.65
% C	2021	0.43	0.65	-	0.00	0.00	-	-	0.00	0.52	0.00	0.34
o, Ф	2022	-1.72	-1.95	_	-1.06	0.00	_	-	-0.91	-1.81	-1.01	-1.51
Φ	2023	-9.17	-9.27	-	-9.68	-20.00	-	-	-9.17	-9.21	-10.20	-9.37
Share	2019	39.17	25.68	0.00	15.89	0.80	0.00	0.00	18.46	64.85	16.69	100.00
Market	2020	39.06	25.76	0.00	15.82	0.84	0.00	0.00	18.52	64.81	16.67	100.00
	2021	39.09	25.84	0.00	15.77	0.84	0.00	0.00	18.46	64.93	16.61	100.00
	2022	39.01	25.72	0.00	15.84	0.85	0.00	0.00	18.57	64.74	16.70	100.00
%	2023	39.10	25.75	0.00	15.79	0.75	0.00	0.00	18.61	64.85	16.54	100.00

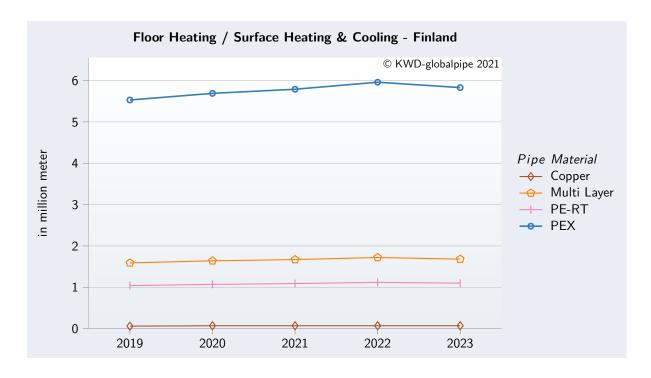
# Sanitary / Hot & Cold Water Systems - Finland

SIS	Year	1	Metal-Pip	es		Plastic	-Pipes		Multi	To	tals	Total
ss in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	PB	layer	Metal	Plastics	
	2019	0.00	1.33	0.22	2.82	0.03	0.00	0.04	3.36	1.55	2.89	7.80
Pipe Million	2020	0.00	1.29	0.21	2.73	0.03	0.00	0.04	3.25	1.50	2.80	7.55
_	2021	0.00	1.30	0.21	2.76	0.03	0.00	0.04	3.27	1.51	2.83	7.61
	2022	0.00	1.28	0.21	2.74	0.03	0.00	0.04	3.24	1.49	2.81	7.54
ge on Years	2023	0.00	1.18	0.20	2.54	0.02	0.00	0.03	2.99	1.38	2.59	6.96
% Change or Previous Yes	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	-3.01	-4.55	-3.19	0.00	_	0.00	-3.27	-3.23	-3.11	-3.21
	2021	_	0.78	0.00	1.10	0.00	-	0.00	0.62	0.67	1.07	0.79
o,	2022	_	-1.54	0.00	-0.72	0.00	_	0.00	-0.92	-1.32	-0.71	-0.92
υ	2023	-	-7.81	-4.76	-7.30	-33.33	-	-25.00	-7.72	-7.38	-7.83	-7.69
Share	2019	0.00	17.05	2.82	36.15	0.38	0.00	0.51	43.08	19.87	37.05	100.00
Market	2020	0.00	17.09	2.78	36.16	0.40	0.00	0.53	43.05	19.87	37.09	100.00
	2021	0.00	17.08	2.76	36.27	0.39	0.00	0.53	42.97	19.84	37.19	100.00
	2022	0.00	16.98	2.79	36.34	0.40	0.00	0.53	42.97	19.76	37.27	100.00
%	2023	0.00	16.95	2.87	36.49	0.29	0.00	0.43	42.96	19.83	37.21	100.00

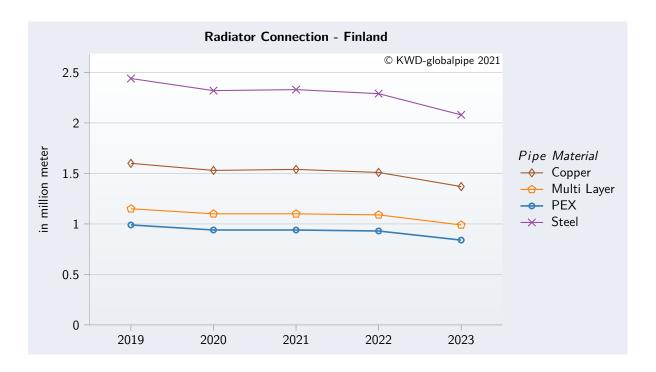
# Heating & Plumbing Pipes - Finland

S	Year	N	∕letal-Pip	es		Plastic	-Pipes		Multi	To	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	2.44	2.99	0.22	9.34	1.12	0.00	0.04	6.10	5.65	10.50	22.25
_ ≣	2020	2.32	2.89	0.21	9.36	1.15	0.00	0.04	5.99	5.42	10.55	21.96
_	2021	2.33	2.91	0.21	9.49	1.17	0.00	0.04	6.04	5.45	10.70	22.19
	2022	2.29	2.86	0.21	9.63	1.20	0.00	0.04	6.05	5.36	10.87	22.28
ge on Years	2023	2.08	2.62	0.20	9.21	1.16	0.00	0.03	5.66	4.90	10.40	20.96
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-4.92	-3.34	-4.55	0.21	2.68	_	0.00	-1.80	-4.07	0.48	-1.30
% C	2021	0.43	0.69	0.00	1.39	1.74	-	0.00	0.83	0.55	1.42	1.05
۰, ۳	2022	-1.72	-1.72	0.00	1.48	2.56	_	0.00	0.17	-1.65	1.59	0.41
υ	2023	-9.17	-8.39	-4.76	-4.36	-3.33	-	-25.00	-6.45	-8.58	-4.32	-5.92
Share	2019	10.97	13.44	0.99	41.98	5.03	0.00	0.18	27.42	25.39	47.19	100.00
	2020	10.56	13.16	0.96	42.62	5.24	0.00	0.18	27.28	24.68	48.04	100.00
Market	2021	10.50	13.11	0.95	42.77	5.27	0.00	0.18	27.22	24.56	48.22	100.00
	2022	10.28	12.84	0.94	43.22	5.39	0.00	0.18	27.15	24.06	48.79	100.00
%	2023	9.92	12.50	0.95	43.94	5.53	0.00	0.14	27.00	23.38	49.62	100.00

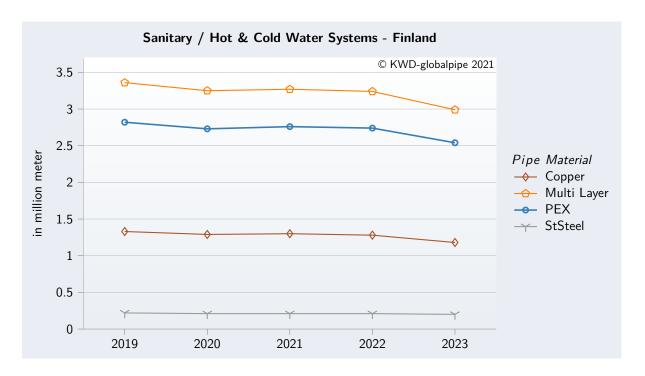
#### Floor Heating / Surface Heating & Cooling - Finland



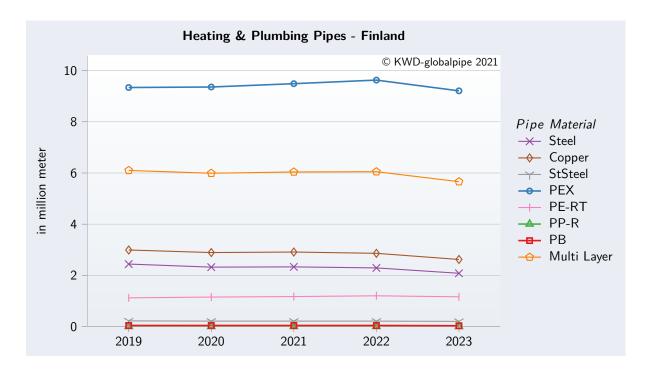
#### Radiator Connection - Finland



## Sanitary / Hot & Cold Water Systems - Finland



Heating & Plumbing Pipes - Finland



# 3.6 France (tables and charts)

# Floor Heating / Surface Heating & Cooling - France

STS	Year	ı	Metal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
ss in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	PB	layer	Metal	Plastics	
Pipes Million M	2019	0.00	1.30	0.00	25.51	3.18	0.00	1.47	0.29	1.30	30.16	31.75
∰	2020	0.00	1.29	0.00	25.31	3.27	0.00	1.46	0.29	1.29	30.04	31.62
_	2021	0.00	1.30	0.00	25.29	3.29	0.00	1.46	0.30	1.30	30.04	31.64
	2022	0.00	1.41	0.00	27.38	3.68	0.00	1.59	0.33	1.41	32.65	34.39
ge on Years	2023	0.00	1.52	0.00	29.46	4.12	0.00	1.72	0.37	1.52	35.30	37.19
% Change or Previous Year	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	-0.77	_	-0.78	2.83	_	-0.68	0.00	-0.77	-0.40	-0.41
	2021	-	0.78	-	-0.08	0.61	-	0.00	3.45	0.78	0.00	0.06
∘∕ ⊡	2022	_	8.46	-	8.26	11.85	_	8.90	10.00	8.46	8.69	8.69
υ	2023	-	7.80	-	7.60	11.96	-	8.18	12.12	7.80	8.12	8.14
Share	2019	0.00	4.09	0.00	80.35	10.02	0.00	4.63	0.91	4.09	94.99	100.00
	2020	0.00	4.08	0.00	80.04	10.34	0.00	4.62	0.92	4.08	95.00	100.00
Market	2021	0.00	4.11	0.00	79.93	10.40	0.00	4.61	0.95	4.11	94.94	100.00
	2022	0.00	4.10	0.00	79.62	10.70	0.00	4.62	0.96	4.10	94.94	100.00
%	2023	0.00	4.09	0.00	79.21	11.08	0.00	4.62	0.99	4.09	94.92	100.00

#### **Radiator Connection - France**

S	Year	N	∕letal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
es in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes in Million Met	2019	2.32	36.19	0.00	13.57	0.10	0.00	0.13	11.80	38.51	13.80	64.11
∃ ≣	2020	2.17	33.88	0.00	12.71	0.10	0.00	0.13	11.05	36.05	12.94	60.04
_	2021	2.12	33.12	0.00	12.42	0.09	0.00	0.12	10.80	35.24	12.63	58.67
	2022	2.08	32.48	0.00	12.18	0.09	0.00	0.12	10.59	34.56	12.39	57.54
ge on Years	2023	2.09	32.64	0.00	12.24	0.09	0.00	0.12	10.64	34.73	12.45	57.82
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-6.47	-6.38	-	-6.34	0.00	_	0.00	-6.36	-6.39	-6.23	-6.35
	2021	-2.30	-2.24	-	-2.28	-10.00	-	-7.69	-2.26	-2.25	-2.40	-2.28
۰, <del>۳</del>	2022	-1.89	-1.93	_	-1.93	0.00	_	0.00	-1.94	-1.93	-1.90	-1.93
Φ	2023	0.48	0.49	-	0.49	0.00	-	0.00	0.47	0.49	0.48	0.49
Share	2019	3.62	56.45	0.00	21.17	0.16	0.00	0.20	18.41	60.07	21.53	100.00
<del>1</del> 6	2020	3.61	56.43	0.00	21.17	0.17	0.00	0.22	18.40	60.04	21.55	100.00
Market	2021	3.61	56.45	0.00	21.17	0.15	0.00	0.20	18.41	60.06	21.53	100.00
	2022	3.61	56.45	0.00	21.17	0.16	0.00	0.21	18.40	60.06	21.53	100.00
%	2023	3.61	56.45	0.00	21.17	0.16	0.00	0.21	18.40	60.07	21.53	100.00

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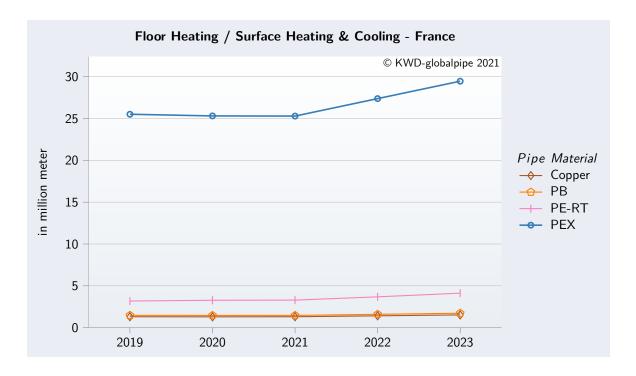
# Sanitary / Hot & Cold Water Systems - France

SIS	Year		Metal-Pip	es		Plastic-	-Pipes		Multi	To	tals	Total
ss in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
	2019	0.00	35.12	0.94	35.61	0.28	0.00	0.69	6.70	36.06	36.58	79.34
Pipe Million	2020	0.00	33.42	0.90	33.93	0.28	0.00	0.66	6.38	34.32	34.87	75.57
_	2021	0.00	32.72	0.88	33.25	0.27	0.00	0.64	6.25	33.60	34.16	74.01
	2022	0.00	32.13	0.86	32.67	0.27	0.00	0.63	6.14	32.99	33.57	72.70
re on Years	2023	0.00	32.68	0.88	33.25	0.27	0.00	0.64	6.25	33.56	34.16	73.97
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	-4.84	-4.26	-4.72	0.00	_	-4.35	-4.78	-4.83	-4.67	-4.75
	2021	-	-2.09	-2.22	-2.00	-3.57	-	-3.03	-2.04	-2.10	-2.04	-2.06
°`	2022	-	-1.80	-2.27	-1.74	0.00	_	-1.56	-1.76	-1.82	-1.73	-1.77
υ	2023	-	1.71	2.33	1.78	0.00	-	1.59	1.79	1.73	1.76	1.75
Share	2019	0.00	44.27	1.18	44.88	0.35	0.00	0.87	8.44	45.45	46.11	100.00
Market	2020	0.00	44.22	1.19	44.90	0.37	0.00	0.87	8.44	45.41	46.14	100.00
	2021	0.00	44.21	1.19	44.93	0.36	0.00	0.86	8.44	45.40	46.16	100.00
	2022	0.00	44.20	1.18	44.94	0.37	0.00	0.87	8.45	45.38	46.18	100.00
%	2023	0.00	44.18	1.19	44.95	0.37	0.00	0.87	8.45	45.37	46.18	100.00

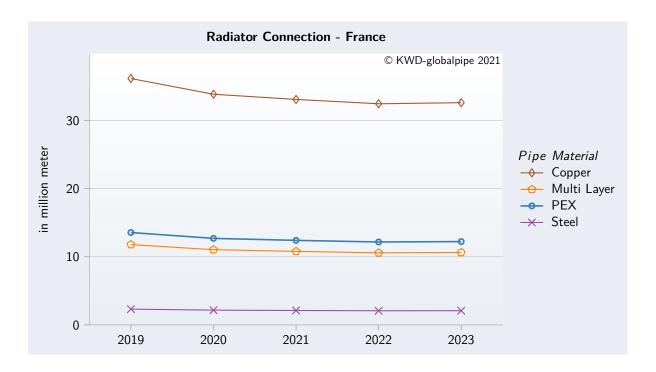
# **Heating & Plumbing Pipes - France**

STS	Year	N	∕letal-Pip	es		Plastic-	-Pipes		Multi	То	tals	Total
Pipes in Million Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Iion M	2019	2.32	72.61	0.94	74.69	3.56	0.00	2.29	18.79	75.87	80.54	175.20
_ ≣	2020	2.17	68.59	0.90	71.95	3.65	0.00	2.25	17.72	71.66	77.85	167.23
~	2021	2.12	67.14	0.88	70.96	3.65	0.00	2.22	17.35	70.14	76.83	164.32
	2022	2.08	66.02	0.86	72.23	4.04	0.00	2.34	17.06	68.96	78.61	164.63
ge on Years	2023	2.09	66.84	0.88	74.95	4.48	0.00	2.48	17.26	69.81	81.91	168.98
% Change or Previous Year	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-6.47	-5.54	-4.26	-3.67	2.53	-	-1.75	-5.69	-5.55	-3.34	-4.55
	2021	-2.30	-2.11	-2.22	-1.38	0.00	-	-1.33	-2.09	-2.12	-1.31	-1.74
o,	2022	-1.89	-1.67	-2.27	1.79	10.68	-	5.41	-1.67	-1.68	2.32	0.19
Φ	2023	0.48	1.24	2.33	3.77	10.89	-	5.98	1.17	1.23	4.20	2.64
Share	2019	1.32	41.44	0.54	42.63	2.03	0.00	1.31	10.72	43.30	45.97	100.00
	2020	1.30	41.02	0.54	43.02	2.18	0.00	1.35	10.60	42.85	46.55	100.00
Market	2021	1.29	40.86	0.54	43.18	2.22	0.00	1.35	10.56	42.69	46.76	100.00
	2022	1.26	40.10	0.52	43.87	2.45	0.00	1.42	10.36	41.89	47.75	100.00
%	2023	1.24	39.55	0.52	44.35	2.65	0.00	1.47	10.21	41.31	48.47	100.00

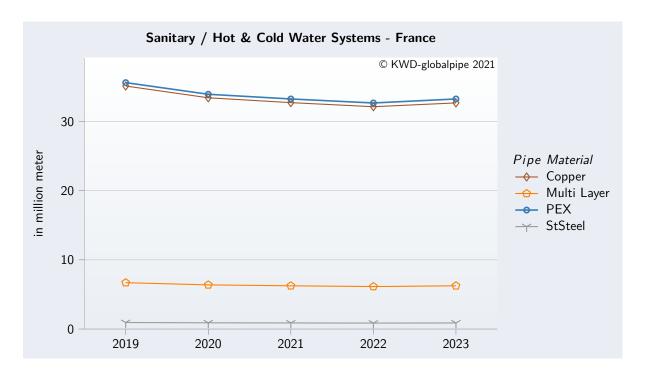
#### Floor Heating / Surface Heating & Cooling - France



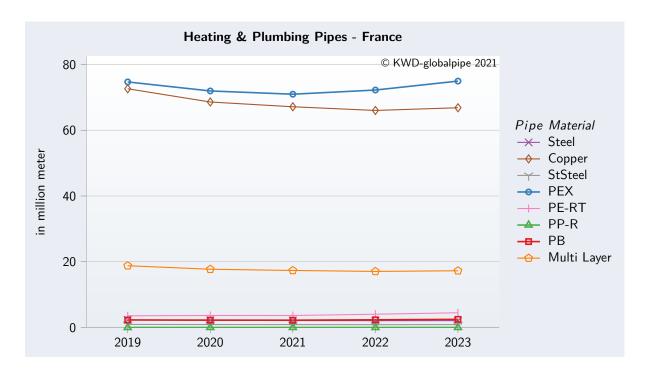
#### **Radiator Connection - France**



#### Sanitary / Hot & Cold Water Systems - France



Heating & Plumbing Pipes - France



# 3.7 Germany (tables and charts)

# Floor Heating / Surface Heating & Cooling - Germany

S.	Year	ı	Metal-Pip	es		Plastic	-Pipes		Multi	To	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	PB	layer	Metal	Plastics	
Pipes Million M	2019	0.00	4.51	0.00	69.30	95.28	0.00	5.37	13.25	4.51	169.95	187.71
<u>_</u>	2020	0.00	4.53	0.00	69.34	97.61	0.00	5.25	13.43	4.53	172.20	190.16
~	2021	0.00	4.53	0.00	69.37	97.73	0.00	5.25	13.44	4.53	172.35	190.32
	2022	0.00	4.75	0.00	72.82	102.69	0.00	5.51	14.11	4.75	181.02	199.88
ge on Years	2023	0.00	4.83	0.00	74.17	104.62	0.00	5.62	14.37	4.83	184.41	203.61
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	0.44	_	0.06	2.45	_	-2.23	1.36	0.44	1.32	1.31
	2021	_	0.00	-	0.04	0.12	-	0.00	0.07	0.00	0.09	0.08
∘∕ ₾	2022	_	4.86	_	4.97	5.08	_	4.95	4.99	4.86	5.03	5.02
Φ	2023	-	1.68	-	1.85	1.88	-	2.00	1.84	1.68	1.87	1.87
Share	2019	0.00	2.40	0.00	36.92	50.76	0.00	2.86	7.06	2.40	90.54	100.00
	2020	0.00	2.38	0.00	36.46	51.33	0.00	2.76	7.06	2.38	90.56	100.00
Market	2021	0.00	2.38	0.00	36.45	51.35	0.00	2.76	7.06	2.38	90.56	100.00
	2022	0.00	2.38	0.00	36.43	51.38	0.00	2.76	7.06	2.38	90.56	100.00
%	2023	0.00	2.37	0.00	36.43	51.38	0.00	2.76	7.06	2.37	90.57	100.00

#### **Radiator Connection - Germany**

ers	Year	N	Лetal-Рір	es		Plastic-	Pipes		Multi	To	tals	Total
es in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	16.30	25.15	0.00	0.93	0.11	0.00	0.35	21.81	41.45	1.39	64.65
_ ≣	2020	16.30	25.15	0.00	0.93	0.11	0.00	0.35	21.81	41.45	1.39	64.65
~	2021	16.07	24.80	0.00	0.91	0.11	0.00	0.35	21.50	40.87	1.37	63.74
	2022	16.17	24.96	0.00	0.92	0.11	0.00	0.35	21.64	41.13	1.38	64.15
ge on Years	2023	15.41	23.78	0.00	0.88	0.10	0.00	0.33	20.63	39.19	1.31	61.13
Change vious Ye	2019	_	_	_	_	_	_	_	_	_	_	_
hai iou	2020	0.00	0.00	-	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
% Chang Previous	2021	-1.41	-1.39	-	-2.15	0.00	-	0.00	-1.42	-1.40	-1.44	-1.41
o^	2022	0.62	0.65	-	1.10	0.00	_	0.00	0.65	0.64	0.73	0.64
υ	2023	-4.70	-4.73	-	-4.35	-9.09	-	-5.71	-4.67	-4.72	-5.07	-4.71
Share	2019	25.21	38.90	0.00	1.44	0.17	0.00	0.54	33.74	64.11	2.15	100.00
<del>1</del>	2020	25.21	38.90	0.00	1.44	0.17	0.00	0.54	33.74	64.11	2.15	100.00
Market	2021	25.21	38.91	0.00	1.43	0.17	0.00	0.55	33.73	64.12	2.15	100.00
	2022	25.21	38.91	0.00	1.43	0.17	0.00	0.55	33.73	64.12	2.15	100.00
%	2023	25.21	38.90	0.00	1.44	0.16	0.00	0.54	33.75	64.11	2.14	100.00

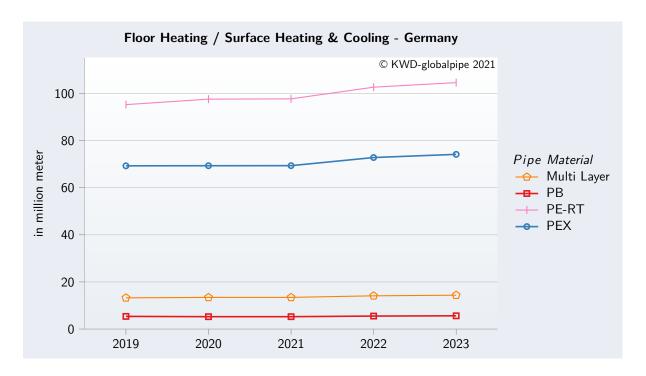
# Sanitary / Hot & Cold Water Systems - Germany

S	Year		Metal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
	2019	0.00	36.32	25.36	5.67	1.57	0.00	1.58	80.30	61.68	8.82	150.80
Pipe Million	2020	0.00	36.50	25.49	5.70	1.58	0.00	1.59	80.71	61.99	8.87	151.57
_	2021	0.00	36.50	25.49	5.70	1.58	0.00	1.59	80.71	61.99	8.87	151.57
	2022	0.00	37.02	25.86	5.78	1.60	0.00	1.61	81.88	62.88	8.99	153.75
on ears	2023	0.00	37.03	25.86	5.78	1.60	0.00	1.61	81.89	62.89	8.99	153.77
% Change o	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	0.50	0.51	0.53	0.64	_	0.63	0.51	0.50	0.57	0.51
	2021	-	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00
o^	2022	-	1.42	1.45	1.40	1.27	_	1.26	1.45	1.44	1.35	1.44
υ	2023	-	0.03	0.00	0.00	0.00	-	0.00	0.01	0.02	0.00	0.01
Share	2019	0.00	24.08	16.82	3.76	1.04	0.00	1.05	53.25	40.90	5.85	100.00
Market	2020	0.00	24.08	16.82	3.76	1.04	0.00	1.05	53.25	40.90	5.85	100.00
	2021	0.00	24.08	16.82	3.76	1.04	0.00	1.05	53.25	40.90	5.85	100.00
	2022	0.00	24.08	16.82	3.76	1.04	0.00	1.05	53.26	40.90	5.85	100.00
%	2023	0.00	24.08	16.82	3.76	1.04	0.00	1.05	53.25	40.90	5.85	100.00

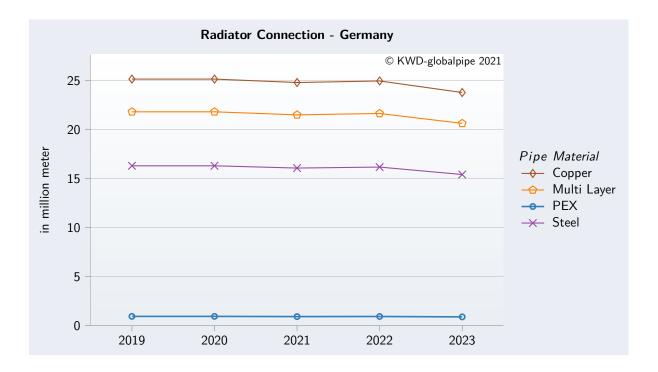
# Heating & Plumbing Pipes - Germany

SI	Year	N	/letal-Pip	es		Plastic	-Pipes		Multi	То	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	16.30	65.98	25.36	75.90	96.96	0.00	7.30	115.36	107.64	180.16	403.16
_ ≣	2020	16.30	66.18	25.49	75.97	99.30	0.00	7.19	115.95	107.97	182.46	406.38
~	2021	16.07	65.83	25.49	75.98	99.42	0.00	7.19	115.65	107.39	182.59	405.63
	2022	16.17	66.73	25.86	79.52	104.40	0.00	7.47	117.63	108.76	191.39	417.78
ge on Years	2023	15.41	65.64	25.86	80.83	106.32	0.00	7.56	116.89	106.91	194.71	418.51
% Change or Previous Year	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	0.00	0.30	0.51	0.09	2.41	_	-1.51	0.51	0.31	1.28	0.80
% C	2021	-1.41	-0.53	0.00	0.01	0.12	_	0.00	-0.26	-0.54	0.07	-0.18
。、 <u></u>	2022	0.62	1.37	1.45	4.66	5.01	_	3.89	1.71	1.28	4.82	3.00
Φ	2023	-4.70	-1.63	0.00	1.65	1.84	-	1.20	-0.63	-1.70	1.73	0.17
Share	2019	4.04	16.37	6.29	18.83	24.05	0.00	1.81	28.61	26.70	44.69	100.00
	2020	4.01	16.29	6.27	18.69	24.44	0.00	1.77	28.53	26.57	44.90	100.00
Market	2021	3.96	16.23	6.28	18.73	24.51	0.00	1.77	28.51	26.47	45.01	100.00
	2022	3.87	15.97	6.19	19.03	24.99	0.00	1.79	28.16	26.03	45.81	100.00
%	2023	3.68	15.68	6.18	19.31	25.40	0.00	1.81	27.93	25.55	46.52	100.00

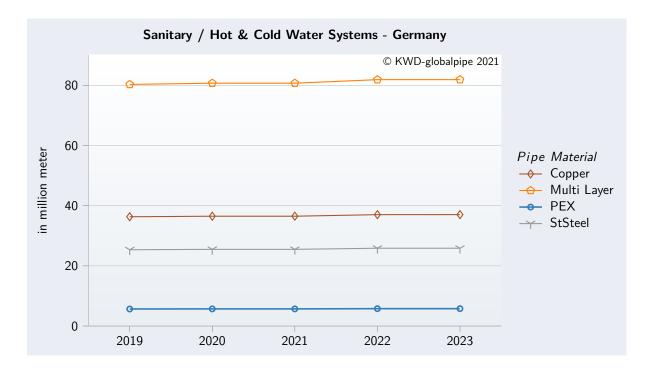
#### Floor Heating / Surface Heating & Cooling - Germany



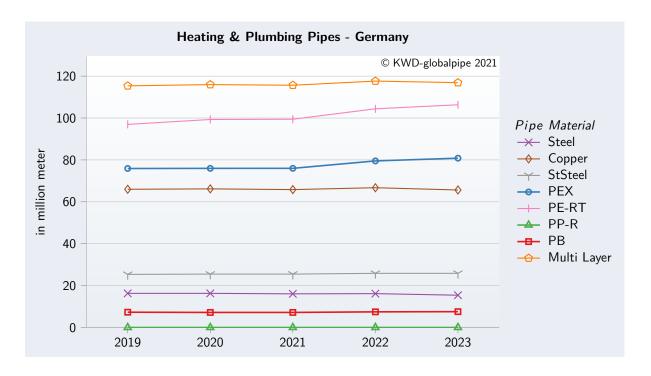
#### **Radiator Connection - Germany**



#### Sanitary / Hot & Cold Water Systems - Germany



**Heating & Plumbing Pipes - Germany** 



# 3.8 Great Britain (tables and charts)

# Floor Heating / Surface Heating & Cooling - Great Britain

S	Year	ı	Metal-Pip	es		Plastic-	Pipes		Multi	Tot	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	0.00	0.17	0.00	9.96	0.33	0.00	7.59	2.22	0.17	17.88	20.27
_ ≣	2020	0.00	0.14	0.00	7.97	0.26	0.00	6.08	1.78	0.14	14.31	16.23
_	2021	0.00	0.17	0.00	9.94	0.33	0.00	7.58	2.22	0.17	17.85	20.24
	2022	0.00	0.18	0.00	10.89	0.37	0.00	8.30	2.43	0.18	19.56	22.17
ge on Years	2023	0.00	0.20	0.00	11.56	0.39	0.00	8.81	2.58	0.20	20.76	23.54
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	-17.65	_	-19.98	-21.21	_	-19.89	-19.82	-17.65	-19.97	-19.93
	2021	_	21.43	-	24.72	26.92	-	24.67	24.72	21.43	24.74	24.71
o, T	2022	_	5.88	_	9.56	12.12	_	9.50	9.46	5.88	9.58	9.54
Φ	2023	-	11.11	-	6.15	5.41	-	6.14	6.17	11.11	6.13	6.18
Share	2019	0.00	0.84	0.00	49.14	1.63	0.00	37.44	10.95	0.84	88.21	100.00
	2020	0.00	0.86	0.00	49.11	1.60	0.00	37.46	10.97	0.86	88.17	100.00
Market	2021	0.00	0.84	0.00	49.11	1.63	0.00	37.45	10.97	0.84	88.19	100.00
	2022	0.00	0.81	0.00	49.12	1.67	0.00	37.44	10.96	0.81	88.23	100.00
%	2023	0.00	0.85	0.00	49.11	1.66	0.00	37.43	10.96	0.85	88.19	100.00

#### Radiator Connection - Great Britain

so.	Year	N.	1etal-Pipe			Plastic-	Pines		Multi	To	tals	Total
ter:			•						iviaiti			
es in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	PB	layer	Metal	Plastics	
Pipes Million M	2019	2.59	45.83	0.00	0.72	0.00	0.00	4.93	3.00	48.42	5.65	57.07
≣	2020	2.19	38.77	0.00	0.61	0.00	0.00	4.17	2.54	40.96	4.78	48.28
_	2021	2.36	41.86	0.00	0.66	0.00	0.00	4.50	2.75	44.22	5.16	52.13
	2022	2.42	42.90	0.00	0.68	0.00	0.00	4.61	2.82	45.32	5.29	53.43
ge on Years	2023	2.42	42.88	0.00	0.68	0.00	0.00	4.61	2.82	45.30	5.29	53.41
nge s Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Change Previous Ye	2020	-15.44	-15.40	_	-15.28	_	_	-15.42	-15.33	-15.41	-15.40	-15.40
	2021	7.76	7.97	-	8.20	-	-	7.91	8.27	7.96	7.95	7.97
∘∕ ∆	2022	2.54	2.48	_	3.03	_	_	2.44	2.55	2.49	2.52	2.49
Φ	2023	0.00	-0.05	-	0.00	-	-	0.00	0.00	-0.04	0.00	-0.04
Share	2019	4.54	80.30	0.00	1.26	0.00	0.00	8.64	5.26	84.84	9.90	100.00
57	2020	4.54	80.30	0.00	1.26	0.00	0.00	8.64	5.26	84.84	9.90	100.00
Market	2021	4.53	80.30	0.00	1.27	0.00	0.00	8.63	5.28	84.83	9.90	100.00
	2022	4.53	80.29	0.00	1.27	0.00	0.00	8.63	5.28	84.82	9.90	100.00
%	2023	4.53	80.28	0.00	1.27	0.00	0.00	8.63	5.28	84.82	9.90	100.00

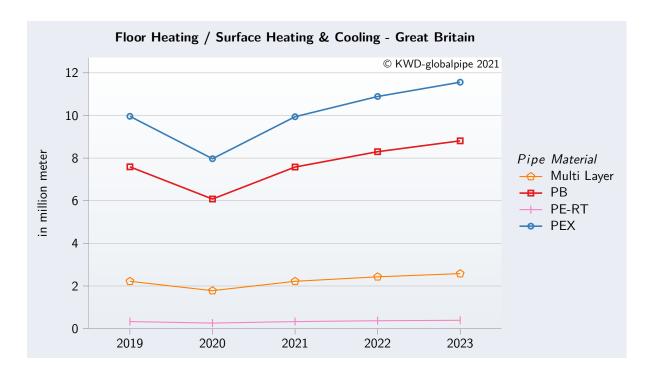
# Sanitary / Hot & Cold Water Systems - Great Britain

SIS	Year	M	1etal-Pipe	es		Plastic-	-Pipes		Multi	To	tals	Total
ss in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes in Million Met	2019	1.24	47.37	0.61	3.03	0.00	0.00	12.66	4.94	49.22	15.69	69.85
≣	2020	1.06	40.82	0.52	2.61	0.00	0.00	10.91	4.25	42.40	13.52	60.17
_	2021	1.14	44.23	0.57	2.83	0.00	0.00	11.82	4.61	45.94	14.65	65.20
	2022	1.16	45.34	0.58	2.90	0.00	0.00	12.11	4.73	47.08	15.01	66.82
ge on Years	2023	1.15	45.43	0.59	2.90	0.00	0.00	12.14	4.74	47.17	15.04	66.95
% Change or Previous Year	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-14.52	-13.83	-14.75	-13.86	_	-	-13.82	-13.97	-13.86	-13.83	-13.86
	2021	7.55	8.35	9.62	8.43	_	_	8.34	8.47	8.35	8.36	8.36
o,	2022	1.75	2.51	1.75	2.47	_	-	2.45	2.60	2.48	2.46	2.48
υ	2023	-0.86	0.20	1.72	0.00	-	-	0.25	0.21	0.19	0.20	0.19
Share	2019	1.78	67.82	0.87	4.34	0.00	0.00	18.12	7.07	70.47	22.46	100.00
7	2020	1.76	67.84	0.86	4.34	0.00	0.00	18.13	7.06	70.47	22.47	100.00
Market	2021	1.75	67.84	0.87	4.34	0.00	0.00	18.13	7.07	70.46	22.47	100.00
	2022	1.74	67.85	0.87	4.34	0.00	0.00	18.12	7.08	70.46	22.46	100.00
%	2023	1.72	67.86	0.88	4.33	0.00	0.00	18.13	7.08	70.46	22.46	100.00

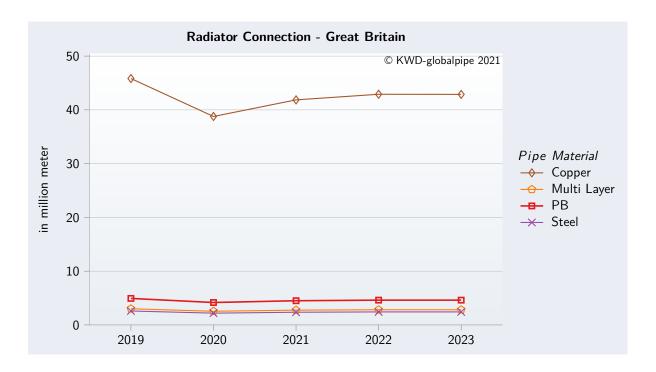
# Heating & Plumbing Pipes - Great Britain

S	Year	N	1etal-Pipe	es		Plastic-	Pipes		Multi	To	tals	Total
Pipes in Million Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes lion M	2019	3.83	93.37	0.61	13.71	0.33	0.00	25.18	10.16	97.81	39.22	147.19
_ ≣	2020	3.25	79.73	0.52	11.19	0.26	0.00	21.16	8.57	83.50	32.61	124.68
_	2021	3.50	86.26	0.57	13.43	0.33	0.00	23.90	9.58	90.33	37.66	137.57
	2022	3.58	88.42	0.58	14.47	0.37	0.00	25.02	9.98	92.58	39.86	142.42
% Change on Previous Years	2023	3.57	88.51	0.59	15.14	0.39	0.00	25.56	10.14	92.67	41.09	143.90
	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-15.14	-14.61	-14.75	-18.38	-21.21	_	-15.97	-15.65	-14.63	-16.85	-15.29
% O	2021	7.69	8.19	9.62	20.02	26.92	_	12.95	11.79	8.18	15.49	10.34
o, Ф	2022	2.29	2.50	1.75	7.74	12.12	_	4.69	4.18	2.49	5.84	3.53
Φ	2023	-0.28	0.10	1.72	4.63	5.41	-	2.16	1.60	0.10	3.09	1.04
Share	2019	2.60	63.44	0.41	9.31	0.22	0.00	17.11	6.90	66.45	26.65	100.00
55	2020	2.61	63.95	0.42	8.97	0.21	0.00	16.97	6.87	66.97	26.15	100.00
Market	2021	2.54	62.70	0.41	9.76	0.24	0.00	17.37	6.96	65.66	27.38	100.00
	2022	2.51	62.08	0.41	10.16	0.26	0.00	17.57	7.01	65.00	27.99	100.00
%	2023	2.48	61.51	0.41	10.52	0.27	0.00	17.76	7.05	64.40	28.55	100.00

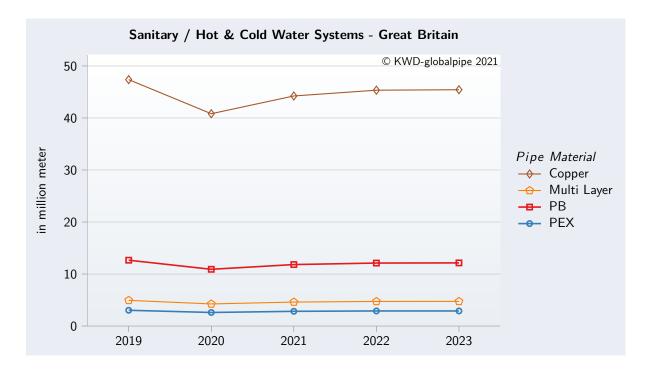
#### Floor Heating / Surface Heating & Cooling - Great Britain



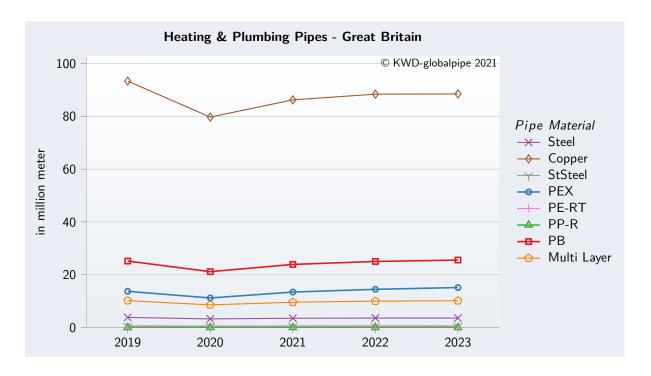
#### Radiator Connection - Great Britain



#### Sanitary / Hot & Cold Water Systems - Great Britain



Heating & Plumbing Pipes - Great Britain



# 3.9 Hungary (tables and charts)

# Floor Heating / Surface Heating & Cooling - Hungary

S	Year	ı	Metal-Pip	es		Plastic-I	Pipes		Multi	To	otals	Total
Pipes in lion Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
ipe ion	2019	0.00	0.00	0.00	0.90	0.47	0.17	0.00	0.35	0.00	1.54	1.89
Pipe Million	2020	0.00	0.00	0.00	1.11	0.59	0.21	0.00	0.43	0.00	1.91	2.34
_	2021	0.00	0.00	0.00	1.17	0.62	0.22	0.00	0.45	0.00	2.01	2.46
	2022	0.00	0.00	0.00	1.01	0.54	0.19	0.00	0.39	0.00	1.74	2.13
ge on Years	2023	0.00	0.00	0.00	1.26	0.67	0.24	0.00	0.49	0.00	2.17	2.66
% Change Previous Ye	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	_	_	23.33	25.53	23.53	_	22.86	_	24.03	23.81
	2021	_	-	-	5.41	5.08	4.76	-	4.65	-	5.24	5.13
∘∕ ₾	2022	_	-	-	-13.68	-12.90	-13.64	-	-13.33	_	-13.43	-13.41
Φ	2023	-	-	-	24.75	24.07	26.32	-	25.64	-	24.71	24.88
Share	2019	0.00	0.00	0.00	47.62	24.87	8.99	0.00	18.52	0.00	81.48	100.00
	2020	0.00	0.00	0.00	47.44	25.21	8.97	0.00	18.38	0.00	81.62	100.00
Market	2021	0.00	0.00	0.00	47.56	25.20	8.94	0.00	18.29	0.00	81.71	100.00
	2022	0.00	0.00	0.00	47.42	25.35	8.92	0.00	18.31	0.00	81.69	100.00
%	2023	0.00	0.00	0.00	47.37	25.19	9.02	0.00	18.42	0.00	81.58	100.00

# **Radiator Connection - Hungary**

SIS	Year	N	/letal-Pip	es		Plastic-l	Pipes		Multi	To	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes in Million Met	2019	0.64	1.14	0.00	0.38	0.34	0.08	0.00	2.31	1.78	0.80	4.89
≣	2020	0.70	1.25	0.00	0.42	0.38	0.08	0.00	2.54	1.95	0.88	5.37
_	2021	0.69	1.23	0.00	0.41	0.37	0.08	0.00	2.50	1.92	0.86	5.28
	2022	0.66	1.20	0.00	0.40	0.35	0.08	0.00	2.41	1.86	0.83	5.10
ge on Years	2023	0.73	1.32	0.00	0.44	0.39	0.09	0.00	2.67	2.05	0.92	5.64
% Change Previous Ye	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	9.38	9.65	_	10.53	11.76	0.00	-	9.96	9.55	10.00	9.82
	2021	-1.43	-1.60	-	-2.38	-2.63	0.00	-	-1.57	-1.54	-2.27	-1.68
۰, <del>۳</del>	2022	-4.35	-2.44	_	-2.44	-5.41	0.00	-	-3.60	-3.12	-3.49	-3.41
Φ	2023	10.61	10.00	-	10.00	11.43	12.50	-	10.79	10.22	10.84	10.59
Share	2019	13.09	23.31	0.00	7.77	6.95	1.64	0.00	47.24	36.40	16.36	100.00
Market	2020	13.04	23.28	0.00	7.82	7.08	1.49	0.00	47.30	36.31	16.39	100.00
	2021	13.07	23.30	0.00	7.77	7.01	1.52	0.00	47.35	36.36	16.29	100.00
	2022	12.94	23.53	0.00	7.84	6.86	1.57	0.00	47.25	36.47	16.27	100.00
%	2023	12.94	23.40	0.00	7.80	6.91	1.60	0.00	47.34	36.35	16.31	100.00

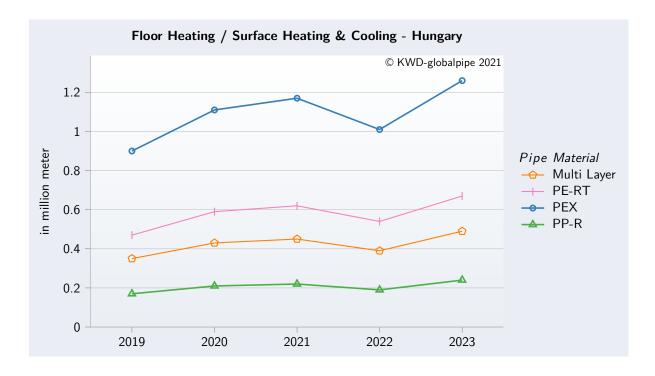
# Sanitary / Hot & Cold Water Systems - Hungary

SLS	Year	N	/letal-Pip	es		Plastic-l	Pipes		Multi	To	tals	Total
ss in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	0.23	0.84	0.00	0.53	0.08	0.57	0.00	2.55	1.07	1.18	4.80
≣	2020	0.24	0.98	0.00	0.61	0.09	0.67	0.00	2.93	1.22	1.37	5.52
_	2021	0.23	0.95	0.00	0.59	0.09	0.65	0.00	2.85	1.18	1.33	5.36
	2022	0.21	0.89	0.00	0.55	0.08	0.60	0.00	2.66	1.10	1.23	4.99
ge on Years	2023	0.23	1.05	0.00	0.64	0.09	0.69	0.00	3.13	1.28	1.42	5.83
% Change or Previous Year	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	4.35	16.67	_	15.09	12.50	17.54	_	14.90	14.02	16.10	15.00
	2021	-4.17	-3.06	-	-3.28	0.00	-2.99	-	-2.73	-3.28	-2.92	-2.90
∘∕ ∆	2022	-8.70	-6.32	-	-6.78	-11.11	-7.69	-	-6.67	-6.78	-7.52	-6.90
Φ	2023	9.52	17.98	-	16.36	12.50	15.00	-	17.67	16.36	15.45	16.83
Share	2019	4.79	17.50	0.00	11.04	1.67	11.88	0.00	53.12	22.29	24.58	100.00
Market	2020	4.35	17.75	0.00	11.05	1.63	12.14	0.00	53.08	22.10	24.82	100.00
	2021	4.29	17.72	0.00	11.01	1.68	12.13	0.00	53.17	22.01	24.81	100.00
	2022	4.21	17.84	0.00	11.02	1.60	12.02	0.00	53.31	22.04	24.65	100.00
%	2023	3.95	18.01	0.00	10.98	1.54	11.84	0.00	53.69	21.96	24.36	100.00

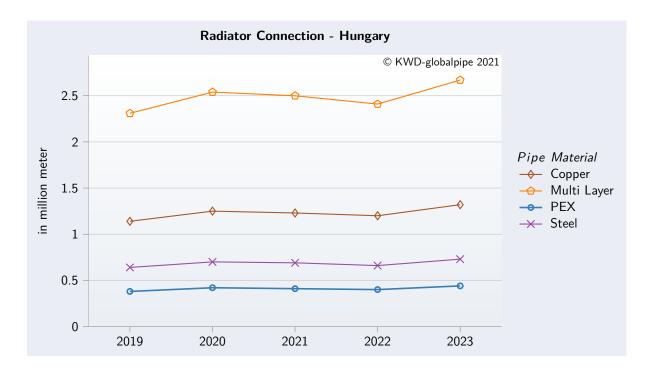
# Heating & Plumbing Pipes - Hungary

S .	Year	N	/letal-Pip	es		Plastic-l	Pipes		Multi	То	tals	Total
Pipes in Million Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes lion M	2019	0.87	1.98	0.00	1.81	0.89	0.82	0.00	5.21	2.85	3.52	11.58
_ ≣	2020	0.94	2.23	0.00	2.14	1.06	0.96	0.00	5.90	3.17	4.16	13.23
~	2021	0.92	2.18	0.00	2.17	1.08	0.95	0.00	5.80	3.10	4.20	13.10
	2022	0.87	2.09	0.00	1.96	0.97	0.87	0.00	5.46	2.96	3.80	12.22
ge on Years	2023	0.96	2.37	0.00	2.34	1.15	1.02	0.00	6.29	3.33	4.51	14.13
% Change or Previous Ye	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	8.05	12.63	-	18.23	19.10	17.07	-	13.24	11.23	18.18	14.25
	2021	-2.13	-2.24	-	1.40	1.89	-1.04	-	-1.69	-2.21	0.96	-0.98
۰, <del>Մ</del>	2022	-5.43	-4.13	-	-9.68	-10.19	-8.42	-	-5.86	-4.52	-9.52	-6.72
a	2023	10.34	13.40	-	19.39	18.56	17.24	-	15.20	12.50	18.68	15.63
Share	2019	7.51	17.10	0.00	15.63	7.69	7.08	0.00	44.99	24.61	30.40	100.00
	2020	7.11	16.86	0.00	16.18	8.01	7.26	0.00	44.60	23.96	31.44	100.00
Market	2021	7.02	16.64	0.00	16.56	8.24	7.25	0.00	44.27	23.66	32.06	100.00
	2022	7.12	17.10	0.00	16.04	7.94	7.12	0.00	44.68	24.22	31.10	100.00
%	2023	6.79	16.77	0.00	16.56	8.14	7.22	0.00	44.52	23.57	31.92	100.00

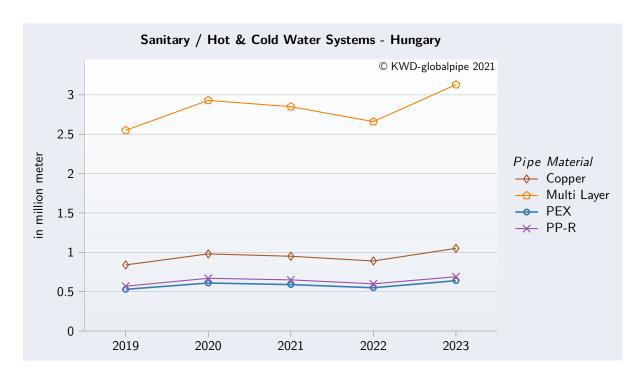
#### Floor Heating / Surface Heating & Cooling - Hungary



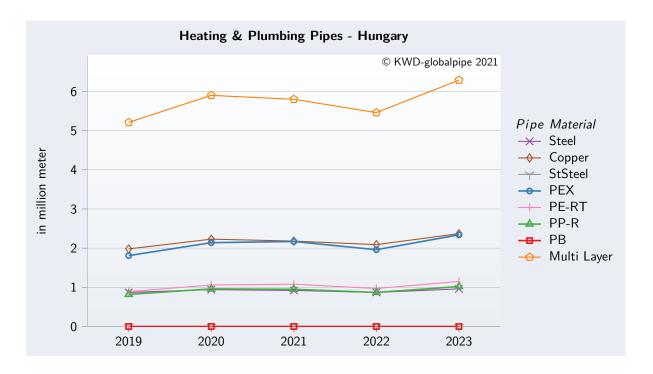
#### Radiator Connection - Hungary



#### Sanitary / Hot & Cold Water Systems - Hungary



Heating & Plumbing Pipes - Hungary



# 3.10 Ireland (tables and charts)

# Floor Heating / Surface Heating & Cooling - Ireland

S	Year	ا	Metal-Pip	es		Plastic	-Pipes		Multi	To	tals	Total
ss in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	PB	layer	Metal	Plastics	
Pipes Million M	2019	0.00	0.00	0.00	1.75	1.48	0.00	0.09	1.20	0.00	3.32	4.52
_ ≣	2020	0.00	0.00	0.00	1.65	1.40	0.00	0.09	1.13	0.00	3.14	4.27
_	2021	0.00	0.00	0.00	1.62	1.37	0.00	0.08	1.11	0.00	3.07	4.18
	2022	0.00	0.00	0.00	1.90	1.60	0.00	0.09	1.30	0.00	3.59	4.89
ge on Years	2023	0.00	0.00	0.00	2.16	1.81	0.00	0.10	1.47	0.00	4.07	5.54
% Change or Previous Year	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	_	_	-5.71	-5.41	_	0.00	-5.83	_	-5.42	-5.53
	2021	-	-	-	-1.82	-2.14	-	-11.11	-1.77	-	-2.23	-2.11
o,	2022	_	-	_	17.28	16.79	_	12.50	17.12	-	16.94	16.99
υ	2023	-	-	-	13.68	13.12	-	11.11	13.08	-	13.37	13.29
Share	2019	0.00	0.00	0.00	38.72	32.74	0.00	1.99	26.55	0.00	73.45	100.00
Market	2020	0.00	0.00	0.00	38.64	32.79	0.00	2.11	26.46	0.00	73.54	100.00
	2021	0.00	0.00	0.00	38.76	32.78	0.00	1.91	26.56	0.00	73.44	100.00
	2022	0.00	0.00	0.00	38.85	32.72	0.00	1.84	26.58	0.00	73.42	100.00
%	2023	0.00	0.00	0.00	38.99	32.67	0.00	1.81	26.53	0.00	73.47	100.00

#### Radiator Connection - Ireland

STS	Year	N	/letal-Pip	es		Plastic-	Pipes		Multi	То	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	PB	layer	Metal	Plastics	
Pipes in Million Met	2019	0.31	2.77	0.00	0.96	0.05	0.00	0.35	1.90	3.08	1.36	6.34
_ ≣	2020	0.29	2.61	0.00	0.91	0.04	0.00	0.33	1.79	2.90	1.28	5.97
_	2021	0.28	2.45	0.00	0.85	0.04	0.00	0.31	1.68	2.73	1.20	5.61
	2022	0.31	2.75	0.00	0.96	0.04	0.00	0.35	1.89	3.06	1.35	6.30
ge on Years	2023	0.31	3.00	0.00	1.05	0.04	0.00	0.38	2.07	3.31	1.47	6.85
% Change or Previous Year	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-6.45	-5.78	_	-5.21	-20.00	_	-5.71	-5.79	-5.84	-5.88	-5.84
	2021	-3.45	-6.13	-	-6.59	0.00	-	-6.06	-6.15	-5.86	-6.25	-6.03
۰, <del>Մ</del>	2022	10.71	12.24	_	12.94	0.00	_	12.90	12.50	12.09	12.50	12.30
Φ	2023	0.00	9.09	-	9.38	0.00	-	8.57	9.52	8.17	8.89	8.73
Share	2019	4.89	43.69	0.00	15.14	0.79	0.00	5.52	29.97	48.58	21.45	100.00
Market	2020	4.86	43.72	0.00	15.24	0.67	0.00	5.53	29.98	48.58	21.44	100.00
	2021	4.99	43.67	0.00	15.15	0.71	0.00	5.53	29.95	48.66	21.39	100.00
	2022	4.92	43.65	0.00	15.24	0.63	0.00	5.56	30.00	48.57	21.43	100.00
%	2023	4.53	43.80	0.00	15.33	0.58	0.00	5.55	30.22	48.32	21.46	100.00

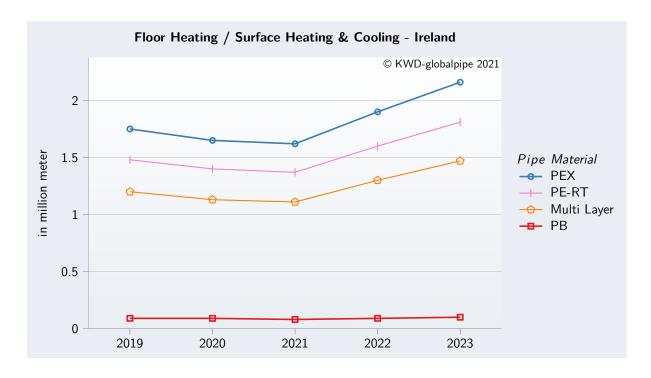
# Sanitary / Hot & Cold Water Systems - Ireland

SIS	Year		Metal-Pip	es		Plastic	-Pipes		Multi	To	tals	Total
ss in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	PB	layer	Metal	Plastics	
Pipes Million M	2019	0.00	2.87	0.00	1.58	0.00	0.15	0.36	1.40	2.87	2.09	6.36
_ ≣	2020	0.00	2.77	0.00	1.52	0.00	0.14	0.35	1.35	2.77	2.01	6.13
_	2021	0.00	2.63	0.00	1.45	0.00	0.13	0.33	1.28	2.63	1.91	5.82
	2022	0.00	3.05	0.00	1.68	0.00	0.15	0.38	1.48	3.05	2.21	6.74
ge on Years	2023	0.00	3.38	0.00	1.86	0.00	0.17	0.42	1.64	3.38	2.45	7.47
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	-3.48	_	-3.80	_	-6.67	-2.78	-3.57	-3.48	-3.83	-3.62
	2021	-	-5.05	-	-4.61	-	-7.14	-5.71	-5.19	-5.05	-4.98	-5.06
o,	2022	_	15.97	-	15.86	_	15.38	15.15	15.62	15.97	15.71	15.81
υ	2023	-	10.82	-	10.71	-	13.33	10.53	10.81	10.82	10.86	10.83
Share	2019	0.00	45.13	0.00	24.84	0.00	2.36	5.66	22.01	45.13	32.86	100.00
	2020	0.00	45.19	0.00	24.80	0.00	2.28	5.71	22.02	45.19	32.79	100.00
Market	2021	0.00	45.19	0.00	24.91	0.00	2.23	5.67	21.99	45.19	32.82	100.00
	2022	0.00	45.25	0.00	24.93	0.00	2.23	5.64	21.96	45.25	32.79	100.00
%	2023	0.00	45.25	0.00	24.90	0.00	2.28	5.62	21.95	45.25	32.80	100.00

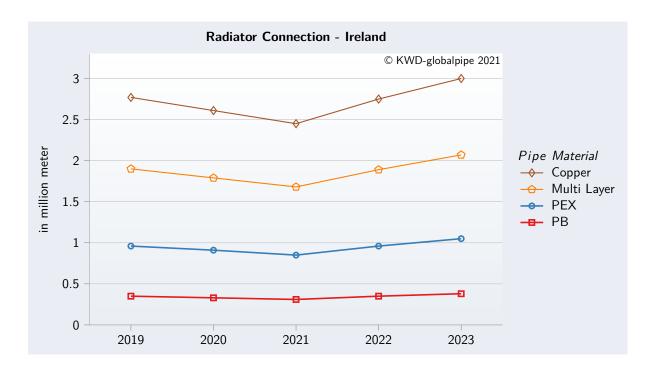
# Heating & Plumbing Pipes - Ireland

S	Year	N	∕letal-Pip	es		Plastic	-Pipes		Multi	To	tals	Total
es in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	0.31	5.64	0.00	4.29	1.53	0.15	0.80	4.50	5.95	6.77	17.22
_ ≣	2020	0.29	5.38	0.00	4.08	1.44	0.14	0.77	4.27	5.67	6.43	16.37
_	2021	0.28	5.08	0.00	3.92	1.41	0.13	0.72	4.07	5.36	6.18	15.61
	2022	0.31	5.80	0.00	4.54	1.64	0.15	0.82	4.67	6.11	7.15	17.93
ge on Years	2023	0.31	6.38	0.00	5.07	1.85	0.17	0.90	5.18	6.69	7.99	19.86
% Change or Previous Year	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-6.45	-4.61	-	-4.90	-5.88	-6.67	-3.75	-5.11	-4.71	-5.02	-4.94
	2021	-3.45	-5.58	-	-3.92	-2.08	-7.14	-6.49	-4.68	-5.47	-3.89	-4.64
。、 <u></u>	2022	10.71	14.17	-	15.82	16.31	15.38	13.89	14.74	13.99	15.70	14.86
υ	2023	0.00	10.00	-	11.67	12.80	13.33	9.76	10.92	9.49	11.75	10.76
Share	2019	1.80	32.75	0.00	24.91	8.89	0.87	4.65	26.13	34.55	39.31	100.00
	2020	1.77	32.86	0.00	24.92	8.80	0.86	4.70	26.08	34.64	39.28	100.00
Market	2021	1.79	32.54	0.00	25.11	9.03	0.83	4.61	26.07	34.34	39.59	100.00
	2022	1.73	32.35	0.00	25.32	9.15	0.84	4.57	26.05	34.08	39.88	100.00
%	2023	1.56	32.12	0.00	25.53	9.32	0.86	4.53	26.08	33.69	40.23	100.00

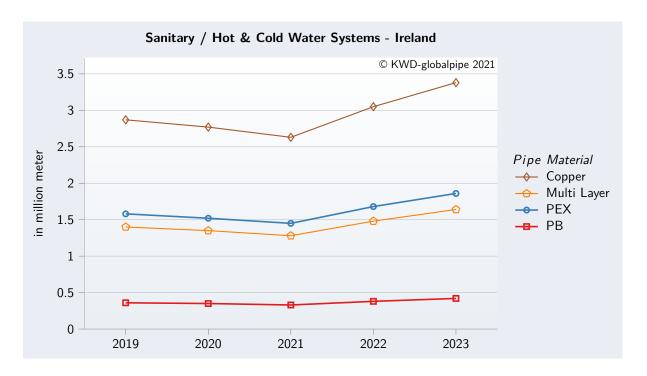
#### Floor Heating / Surface Heating & Cooling - Ireland



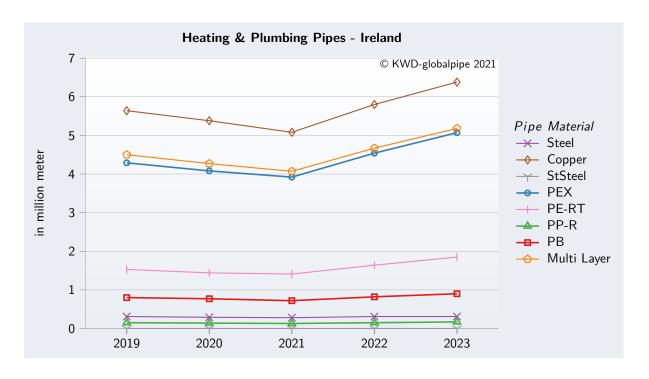
#### Radiator Connection - Ireland



#### Sanitary / Hot & Cold Water Systems - Ireland



Heating & Plumbing Pipes - Ireland



# 3.11 Italy (tables and charts)

# Floor Heating / Surface Heating & Cooling - Italy

S.	Year	1	Metal-Pip	es		Plastic-l	Pipes		Multi	То	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	0.00	0.11	0.00	6.68	4.61	0.00	0.15	2.30	0.11	11.44	13.85
<u>_</u>	2020	0.00	0.10	0.00	6.51	4.49	0.00	0.15	2.24	0.10	11.15	13.49
_	2021	0.00	0.10	0.00	6.69	4.61	0.00	0.15	2.31	0.10	11.45	13.86
	2022	0.00	0.11	0.00	7.23	4.98	0.00	0.16	2.50	0.11	12.37	14.98
ge on Years	2023	0.00	0.11	0.00	7.36	5.07	0.00	0.17	2.54	0.11	12.60	15.25
% Change o	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	-9.09	-	-2.54	-2.60	_	0.00	-2.61	-9.09	-2.53	-2.60
	2021	-	0.00	-	2.76	2.67	-	0.00	3.12	0.00	2.69	2.74
o, T	2022	_	10.00	_	8.07	8.03	_	6.67	8.23	10.00	8.03	8.08
Φ	2023	-	0.00	-	1.80	1.81	-	6.25	1.60	0.00	1.86	1.80
Share	2019	0.00	0.79	0.00	48.23	33.29	0.00	1.08	16.61	0.79	82.60	100.00
	2020	0.00	0.74	0.00	48.26	33.28	0.00	1.11	16.60	0.74	82.65	100.00
Market	2021	0.00	0.72	0.00	48.27	33.26	0.00	1.08	16.67	0.72	82.61	100.00
	2022	0.00	0.73	0.00	48.26	33.24	0.00	1.07	16.69	0.73	82.58	100.00
%	2023	0.00	0.72	0.00	48.26	33.25	0.00	1.11	16.66	0.72	82.62	100.00

#### Radiator Connection - Italy

S	Year	N	Лetal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
es in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	4.45	22.52	0.00	1.49	0.10	0.42	0.10	10.02	26.97	2.11	39.10
_ ≣	2020	4.35	21.90	0.00	1.45	0.10	0.41	0.10	9.89	26.25	2.06	38.20
_	2021	4.33	21.70	0.00	1.45	0.10	0.41	0.10	9.95	26.03	2.06	38.04
	2022	4.45	22.23	0.00	1.49	0.10	0.42	0.10	10.32	26.68	2.11	39.11
ge on Years	2023	4.46	22.16	0.00	1.49	0.10	0.42	0.10	10.44	26.62	2.11	39.17
% Change or Previous Year	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-2.25	-2.75	_	-2.68	0.00	-2.38	0.00	-1.30	-2.67	-2.37	-2.30
% C	2021	-0.46	-0.91	-	0.00	0.00	0.00	0.00	0.61	-0.84	0.00	-0.42
o, Ф	2022	2.77	2.44	_	2.76	0.00	2.44	0.00	3.72	2.50	2.43	2.81
Φ	2023	0.22	-0.31	-	0.00	0.00	0.00	0.00	1.16	-0.22	0.00	0.15
Share	2019	11.38	57.60	0.00	3.81	0.26	1.07	0.26	25.63	68.98	5.40	100.00
# #	2020	11.39	57.33	0.00	3.80	0.26	1.07	0.26	25.89	68.72	5.39	100.00
Market	2021	11.38	57.05	0.00	3.81	0.26	1.08	0.26	26.16	68.43	5.42	100.00
	2022	11.38	56.84	0.00	3.81	0.26	1.07	0.26	26.39	68.22	5.40	100.00
%	2023	11.39	56.57	0.00	3.80	0.26	1.07	0.26	26.65	67.96	5.39	100.00

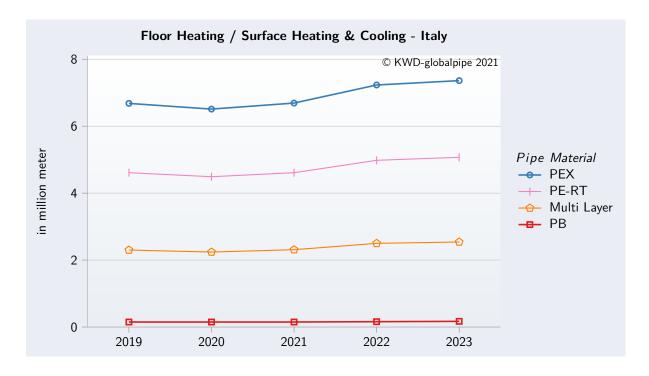
# Sanitary / Hot & Cold Water Systems - Italy

S	Year	N	∕letal-Pip	es		Plastic	-Pipes		Multi	То	tals	Total
es in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	0.66	6.66	0.75	3.29	0.15	5.70	0.76	24.90	8.07	9.90	42.87
_ ≣	2020	0.62	6.54	0.74	3.24	0.15	5.59	0.75	24.44	7.90	9.73	42.07
_	2021	0.60	6.57	0.74	3.26	0.15	5.61	0.75	24.53	7.91	9.77	42.21
	2022	0.59	6.77	0.77	3.37	0.16	5.78	0.78	25.28	8.13	10.09	43.50
ge on Years	2023	0.57	6.84	0.78	3.41	0.16	5.83	0.78	25.51	8.19	10.18	43.88
% Change Previous Ye	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-6.06	-1.80	-1.33	-1.52	0.00	-1.93	-1.32	-1.85	-2.11	-1.72	-1.87
	2021	-3.23	0.38	0.00	0.62	0.00	0.36	0.00	0.37	0.06	0.41	0.32
۰, <del>۳</del>	2022	-1.67	3.12	4.05	3.37	6.67	3.03	4.00	3.06	2.85	3.28	3.07
υ	2023	-3.39	1.03	1.30	1.19	0.00	0.87	0.00	0.91	0.74	0.89	0.87
Share	2019	1.54	15.54	1.75	7.67	0.35	13.30	1.77	58.08	18.82	23.09	100.00
	2020	1.47	15.55	1.76	7.70	0.36	13.29	1.78	58.09	18.78	23.13	100.00
Market	2021	1.42	15.56	1.75	7.72	0.36	13.29	1.78	58.12	18.73	23.15	100.00
	2022	1.36	15.56	1.77	7.75	0.37	13.29	1.79	58.11	18.69	23.20	100.00
%	2023	1.30	15.59	1.78	7.77	0.36	13.29	1.78	58.14	18.66	23.20	100.00

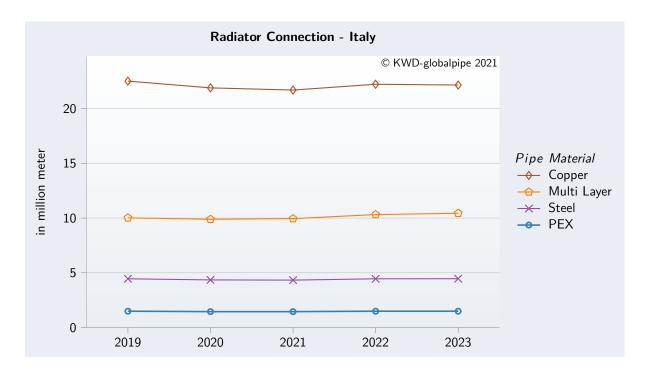
# Heating & Plumbing Pipes - Italy

SrS	Year	N	∕letal-Pip	es		Plastic	-Pipes		Multi	To	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	5.11	29.29	0.75	11.46	4.86	6.12	1.01	37.22	35.15	23.45	95.82
<u></u>	2020	4.97	28.54	0.74	11.20	4.74	6.00	1.00	36.57	34.25	22.94	93.76
_	2021	4.93	28.37	0.74	11.40	4.86	6.02	1.00	36.79	34.04	23.28	94.11
	2022	5.04	29.11	0.77	12.09	5.24	6.20	1.04	38.10	34.92	24.57	97.59
ge on Years	2023	5.03	29.11	0.78	12.26	5.33	6.25	1.05	38.49	34.92	24.89	98.30
% Change or Previous Year	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-2.74	-2.56	-1.33	-2.27	-2.47	-1.96	-0.99	-1.75	-2.56	-2.17	-2.15
% O	2021	-0.80	-0.61	0.00	1.79	2.53	0.33	0.00	0.60	-0.63	1.48	0.37
o, Ф	2022	2.23	2.63	4.05	6.05	7.82	2.99	4.00	3.56	2.60	5.54	3.70
Φ	2023	-0.20	0.00	1.30	1.41	1.72	0.81	0.96	1.02	0.00	1.30	0.73
Share	2019	5.33	30.57	0.78	11.96	5.07	6.39	1.05	38.84	36.68	24.47	100.00
	2020	5.30	30.44	0.79	11.95	5.06	6.40	1.07	39.00	36.53	24.47	100.00
Market	2021	5.24	30.14	0.79	12.11	5.16	6.40	1.06	39.09	36.17	24.74	100.00
	2022	5.16	29.83	0.79	12.39	5.37	6.35	1.07	39.04	35.78	25.18	100.00
%	2023	5.12	29.61	0.79	12.47	5.42	6.36	1.07	39.16	35.52	25.32	100.00

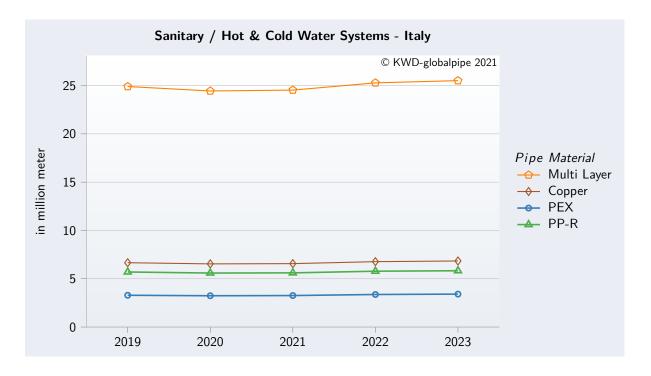
#### Floor Heating / Surface Heating & Cooling - Italy



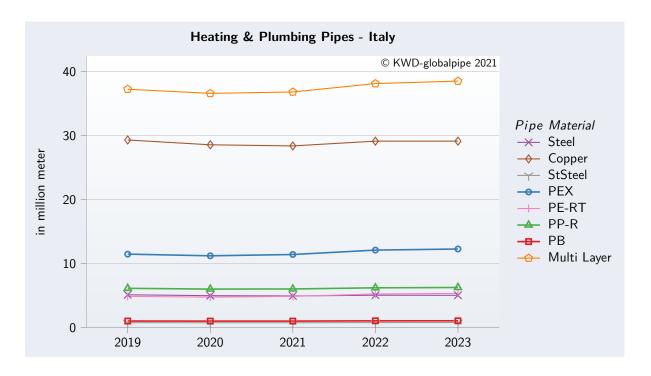
#### Radiator Connection - Italy



# Sanitary / Hot & Cold Water Systems - Italy



# Heating & Plumbing Pipes - Italy



# 3.12 Netherlands (tables and charts)

# Floor Heating / Surface Heating & Cooling - Netherlands

S.	Year	ı	Metal-Pip	es		Plastic-l	Pipes		Multi	To	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
	2019	0.00	0.03	0.00	3.66	19.11	0.00	0.05	3.24	0.03	22.82	26.09
Pipe Million	2020	0.00	0.03	0.00	3.47	18.09	0.00	0.05	3.07	0.03	21.61	24.71
_	2021	0.00	0.03	0.00	3.67	19.14	0.00	0.05	3.24	0.03	22.86	26.13
	2022	0.00	0.03	0.00	3.82	19.94	0.00	0.05	3.38	0.03	23.81	27.22
ge on Years	2023	0.00	0.03	0.00	3.91	20.41	0.00	0.05	3.46	0.03	24.37	27.86
% Change or Previous Year	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	0.00	_	-5.19	-5.34	_	0.00	-5.25	0.00	-5.30	-5.29
	2021	_	0.00	-	5.76	5.80	-	0.00	5.54	0.00	5.78	5.75
o, T	2022	_	0.00	_	4.09	4.18	_	0.00	4.32	0.00	4.16	4.17
Φ	2023	-	0.00	-	2.36	2.36	-	0.00	2.37	0.00	2.35	2.35
Share	2019	0.00	0.11	0.00	14.03	73.25	0.00	0.19	12.42	0.11	87.47	100.00
Market	2020	0.00	0.12	0.00	14.04	73.21	0.00	0.20	12.42	0.12	87.45	100.00
	2021	0.00	0.11	0.00	14.05	73.25	0.00	0.19	12.40	0.11	87.49	100.00
	2022	0.00	0.11	0.00	14.03	73.25	0.00	0.18	12.42	0.11	87.47	100.00
%	2023	0.00	0.11	0.00	14.03	73.26	0.00	0.18	12.42	0.11	87.47	100.00

#### **Radiator Connection - Netherlands**

STS	Year	N	Лetal-Рір	es		Plastic-	Pipes		Multi	To	tals	Total
Pipes in Million Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	PB	layer	Metal	Plastics	
Pipes in ion Met	2019	2.75	1.14	0.00	1.53	2.50	0.00	0.33	15.41	3.89	4.36	23.66
<u> </u>	2020	2.56	1.06	0.00	1.42	2.32	0.00	0.30	14.31	3.62	4.04	21.97
_	2021	2.59	1.08	0.00	1.44	2.35	0.00	0.31	14.50	3.67	4.10	22.27
	2022	2.60	1.08	0.00	1.45	2.36	0.00	0.31	14.58	3.68	4.12	22.38
% Change on Previous Years	2023	2.57	1.07	0.00	1.43	2.33	0.00	0.31	14.44	3.64	4.07	22.15
	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-6.91	-7.02	-	-7.19	-7.20	_	-9.09	-7.14	-6.94	-7.34	-7.14
% O	2021	1.17	1.89	-	1.41	1.29	-	3.33	1.33	1.38	1.49	1.37
o, Ф	2022	0.39	0.00	_	0.69	0.43	_	0.00	0.55	0.27	0.49	0.49
Φ	2023	-1.15	-0.93	-	-1.38	-1.27	-	0.00	-0.96	-1.09	-1.21	-1.03
Share	2019	11.62	4.82	0.00	6.47	10.57	0.00	1.39	65.13	16.44	18.43	100.00
# 57	2020	11.65	4.82	0.00	6.46	10.56	0.00	1.37	65.13	16.48	18.39	100.00
Market	2021	11.63	4.85	0.00	6.47	10.55	0.00	1.39	65.11	16.48	18.41	100.00
	2022	11.62	4.83	0.00	6.48	10.55	0.00	1.39	65.15	16.44	18.41	100.00
%	2023	11.60	4.83	0.00	6.46	10.52	0.00	1.40	65.19	16.43	18.37	100.00

# Sanitary / Hot & Cold Water Systems - Netherlands

SIS	Year	1	Metal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
ss in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	PB	layer	Metal	Plastics	
Pipes Million M	2019	0.00	9.19	0.17	1.32	1.67	0.00	0.74	13.38	9.36	3.73	26.47
<u></u>	2020	0.00	8.71	0.16	1.25	1.58	0.00	0.70	12.68	8.87	3.53	25.08
_	2021	0.00	9.03	0.17	1.30	1.64	0.00	0.73	13.15	9.20	3.67	26.02
	2022	0.00	9.27	0.17	1.34	1.68	0.00	0.74	13.49	9.44	3.76	26.69
ge on Years	2023	0.00	9.44	0.18	1.37	1.71	0.00	0.75	13.74	9.62	3.83	27.19
% Change o	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	-5.22	-5.88	-5.30	-5.39	_	-5.41	-5.23	-5.24	-5.36	-5.25
	2021	-	3.67	6.25	4.00	3.80	-	4.29	3.71	3.72	3.97	3.75
۰, <del>Մ</del>	2022	_	2.66	0.00	3.08	2.44	_	1.37	2.59	2.61	2.45	2.57
Φ	2023	-	1.83	5.88	2.24	1.79	-	1.35	1.85	1.91	1.86	1.87
Share	2019	0.00	34.72	0.64	4.99	6.31	0.00	2.80	50.55	35.36	14.09	100.00
Market	2020	0.00	34.73	0.64	4.98	6.30	0.00	2.79	50.56	35.37	14.07	100.00
	2021	0.00	34.70	0.65	5.00	6.30	0.00	2.81	50.54	35.36	14.10	100.00
	2022	0.00	34.73	0.64	5.02	6.29	0.00	2.77	50.54	35.37	14.09	100.00
%	2023	0.00	34.72	0.66	5.04	6.29	0.00	2.76	50.53	35.38	14.09	100.00

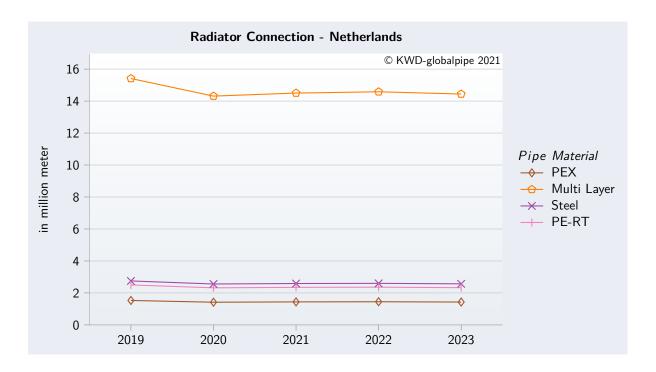
# **Heating & Plumbing Pipes - Netherlands**

SI	Year	N	/letal-Pip	es		Plastic-	Pipes		Multi	То	tals	Total
Pipes in Million Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes lion M	2019	2.75	10.36	0.17	6.51	23.28	0.00	1.12	32.03	13.28	30.91	76.22
_ ≣	2020	2.56	9.80	0.16	6.14	21.99	0.00	1.05	30.06	12.52	29.18	71.76
~	2021	2.59	10.14	0.17	6.41	23.13	0.00	1.09	30.89	12.90	30.63	74.42
	2022	2.60	10.38	0.17	6.61	23.98	0.00	1.10	31.45	13.15	31.69	76.29
ge on Years	2023	2.57	10.54	0.18	6.71	24.45	0.00	1.11	31.64	13.29	32.27	77.20
% Change or Previous Yes	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-6.91	-5.41	-5.88	-5.68	-5.54	_	-6.25	-6.15	-5.72	-5.60	-5.85
% C	2021	1.17	3.47	6.25	4.40	5.18	-	3.81	2.76	3.04	4.97	3.71
۰, <del>Մ</del>	2022	0.39	2.37	0.00	3.12	3.67	_	0.92	1.81	1.94	3.46	2.51
a	2023	-1.15	1.54	5.88	1.51	1.96	-	0.91	0.60	1.06	1.83	1.19
Share	2019	3.61	13.59	0.22	8.54	30.54	0.00	1.47	42.02	17.42	40.55	100.00
	2020	3.57	13.66	0.22	8.56	30.64	0.00	1.46	41.89	17.45	40.66	100.00
Market	2021	3.48	13.63	0.23	8.61	31.08	0.00	1.46	41.51	17.33	41.16	100.00
	2022	3.41	13.61	0.22	8.66	31.43	0.00	1.44	41.22	17.24	41.54	100.00
%	2023	3.33	13.65	0.23	8.69	31.67	0.00	1.44	40.98	17.22	41.80	100.00

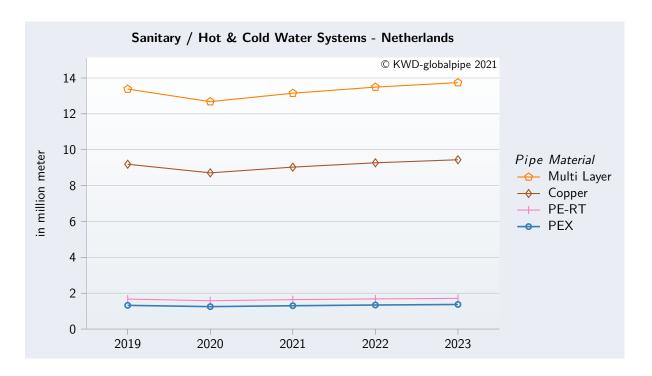
#### Floor Heating / Surface Heating & Cooling - Netherlands



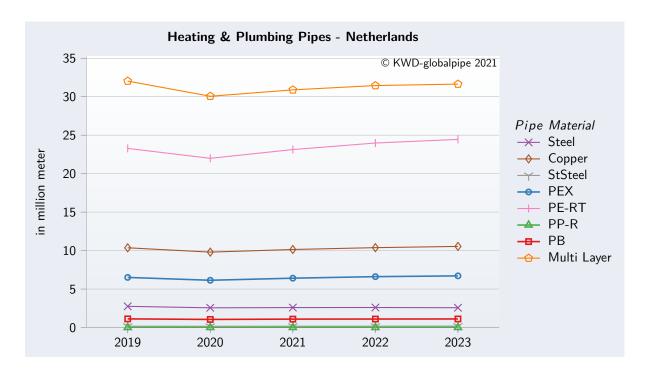
#### **Radiator Connection - Netherlands**



#### Sanitary / Hot & Cold Water Systems - Netherlands



**Heating & Plumbing Pipes - Netherlands** 



# 3.13 Norway (tables and charts)

# Floor Heating / Surface Heating & Cooling - Norway

S.	Year	1	Metal-Pip	es		Plastic-l	Pipes		Multi	To	tals	Total
es in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	0.00	0.08	0.00	3.36	1.53	0.00	0.00	1.12	0.08	4.89	6.09
_ ≣	2020	0.00	0.08	0.00	3.40	1.55	0.00	0.00	1.14	0.08	4.95	6.17
_	2021	0.00	0.09	0.00	3.59	1.64	0.00	0.00	1.20	0.09	5.23	6.52
	2022	0.00	0.09	0.00	3.69	1.68	0.00	0.00	1.23	0.09	5.37	6.69
ge on Years	2023	0.00	0.09	0.00	3.67	1.67	0.00	0.00	1.22	0.09	5.34	6.65
% Change of Previous Year	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	0.00	_	1.19	1.31	_	_	1.79	0.00	1.23	1.31
	2021	-	12.50	-	5.59	5.81	-	-	5.26	12.50	5.66	5.67
o, T	2022	_	0.00	_	2.79	2.44	_	_	2.50	0.00	2.68	2.61
Φ	2023	-	0.00	-	-0.54	-0.60	-	-	-0.81	0.00	-0.56	-0.60
Share	2019	0.00	1.31	0.00	55.17	25.12	0.00	0.00	18.39	1.31	80.30	100.00
Market	2020	0.00	1.30	0.00	55.11	25.12	0.00	0.00	18.48	1.30	80.23	100.00
	2021	0.00	1.38	0.00	55.06	25.15	0.00	0.00	18.40	1.38	80.21	100.00
	2022	0.00	1.35	0.00	55.16	25.11	0.00	0.00	18.39	1.35	80.27	100.00
%	2023	0.00	1.35	0.00	55.19	25.11	0.00	0.00	18.35	1.35	80.30	100.00

# Radiator Connection - Norway

STS	Year	N	/letal-Pip	es		Plastic-l	Pipes		Multi	То	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes in Million Met	2019	2.06	1.65	0.00	1.24	0.08	0.00	0.00	1.07	3.71	1.32	6.10
_ ≣	2020	2.03	1.62	0.00	1.22	0.08	0.00	0.00	1.06	3.65	1.30	6.01
_	2021	2.06	1.65	0.00	1.24	0.08	0.00	0.00	1.07	3.71	1.32	6.10
	2022	2.01	1.61	0.00	1.21	0.08	0.00	0.00	1.04	3.62	1.29	5.95
ge on Years	2023	1.98	1.59	0.00	1.19	80.0	0.00	0.00	1.02	3.57	1.27	5.86
% Change o	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-1.46	-1.82	_	-1.61	0.00	_	-	-0.93	-1.62	-1.52	-1.48
	2021	1.48	1.85	-	1.64	0.00	-	-	0.94	1.64	1.54	1.50
۰, <del>Մ</del>	2022	-2.43	-2.42	_	-2.42	0.00	_	_	-2.80	-2.43	-2.27	-2.46
Φ	2023	-1.49	-1.24	-	-1.65	0.00	-	-	-1.92	-1.38	-1.55	-1.51
Market Share	2019	33.77	27.05	0.00	20.33	1.31	0.00	0.00	17.54	60.82	21.64	100.00
	2020	33.78	26.96	0.00	20.30	1.33	0.00	0.00	17.64	60.73	21.63	100.00
	2021	33.77	27.05	0.00	20.33	1.31	0.00	0.00	17.54	60.82	21.64	100.00
	2022	33.78	27.06	0.00	20.34	1.34	0.00	0.00	17.48	60.84	21.68	100.00
%	2023	33.79	27.13	0.00	20.31	1.37	0.00	0.00	17.41	60.92	21.67	100.00

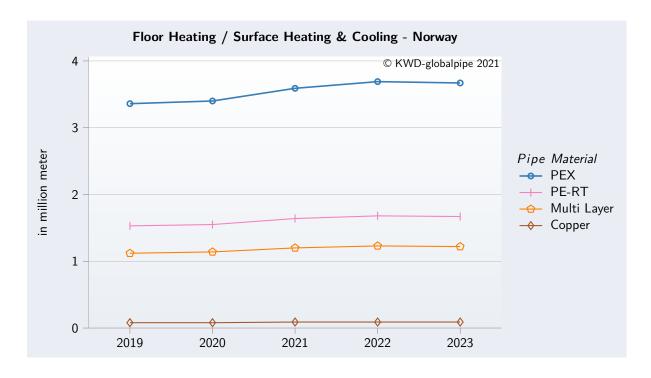
# Sanitary / Hot & Cold Water Systems - Norway

STS	Year	N	/letal-Pip	es		Plastic-l	Pipes		Multi	То	tals	Total
ss in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
	2019	0.24	2.75	0.50	3.35	0.00	0.00	0.00	0.92	3.49	3.35	7.76
Pipe Million	2020	0.23	2.73	0.50	3.32	0.00	0.00	0.00	0.92	3.46	3.32	7.70
_	2021	0.23	2.82	0.52	3.43	0.00	0.00	0.00	0.95	3.57	3.43	7.95
	2022	0.22	2.79	0.51	3.39	0.00	0.00	0.00	0.94	3.52	3.39	7.85
ge on Years	2023	0.21	2.78	0.51	3.39	0.00	0.00	0.00	0.94	3.50	3.39	7.83
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-4.17	-0.73	0.00	-0.90	_	_	_	0.00	-0.86	-0.90	-0.77
	2021	0.00	3.30	4.00	3.31	-	-	-	3.26	3.18	3.31	3.25
۰, <del>Մ</del>	2022	-4.35	-1.06	-1.92	-1.17	_	_	-	-1.05	-1.40	-1.17	-1.26
Φ	2023	-4.55	-0.36	0.00	0.00	-	-	-	0.00	-0.57	0.00	-0.25
Share	2019	3.09	35.44	6.44	43.17	0.00	0.00	0.00	11.86	44.97	43.17	100.00
Market	2020	2.99	35.45	6.49	43.12	0.00	0.00	0.00	11.95	44.94	43.12	100.00
	2021	2.89	35.47	6.54	43.14	0.00	0.00	0.00	11.95	44.91	43.14	100.00
	2022	2.80	35.54	6.50	43.18	0.00	0.00	0.00	11.97	44.84	43.18	100.00
%	2023	2.68	35.50	6.51	43.30	0.00	0.00	0.00	12.01	44.70	43.30	100.00

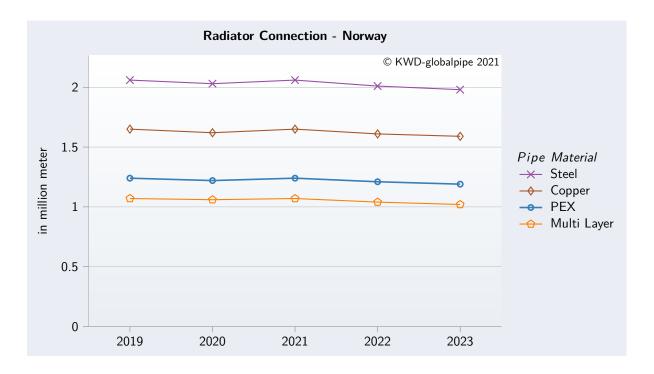
# Heating & Plumbing Pipes - Norway

STS	Year	N	∕letal-Pip	es		Plastic-l	Pipes		Multi	То	tals	Total
es in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	2.30	4.48	0.50	7.95	1.61	0.00	0.00	3.11	7.28	9.56	19.95
<u></u>	2020	2.26	4.43	0.50	7.94	1.63	0.00	0.00	3.12	7.19	9.57	19.88
_	2021	2.29	4.56	0.52	8.26	1.72	0.00	0.00	3.22	7.37	9.98	20.57
	2022	2.23	4.49	0.51	8.29	1.76	0.00	0.00	3.21	7.23	10.05	20.49
ge on Years	2023	2.19	4.46	0.51	8.25	1.75	0.00	0.00	3.18	7.16	10.00	20.34
% Change or Previous Yes	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-1.74	-1.12	0.00	-0.13	1.24	-	-	0.32	-1.24	0.10	-0.35
	2021	1.33	2.93	4.00	4.03	5.52	-	-	3.21	2.50	4.28	3.47
٥, ٣	2022	-2.62	-1.54	-1.92	0.36	2.33	_	_	-0.31	-1.90	0.70	-0.39
Φ	2023	-1.79	-0.67	0.00	-0.48	-0.57	-	-	-0.93	-0.97	-0.50	-0.73
Share	2019	11.53	22.46	2.51	39.85	8.07	0.00	0.00	15.59	36.49	47.92	100.00
#	2020	11.37	22.28	2.52	39.94	8.20	0.00	0.00	15.69	36.17	48.14	100.00
Market	2021	11.13	22.17	2.53	40.16	8.36	0.00	0.00	15.65	35.83	48.52	100.00
	2022	10.88	21.91	2.49	40.46	8.59	0.00	0.00	15.67	35.29	49.05	100.00
%	2023	10.77	21.93	2.51	40.56	8.60	0.00	0.00	15.63	35.20	49.16	100.00

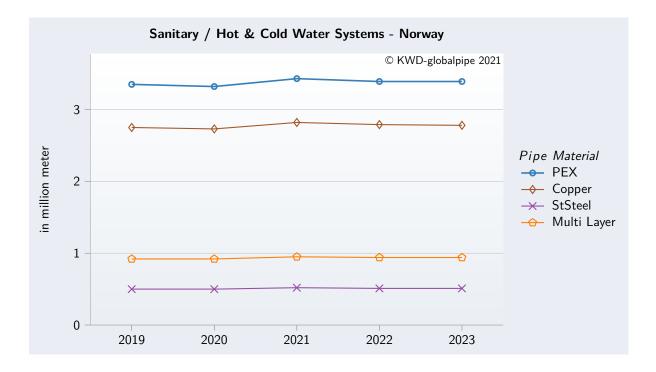
#### Floor Heating / Surface Heating & Cooling - Norway



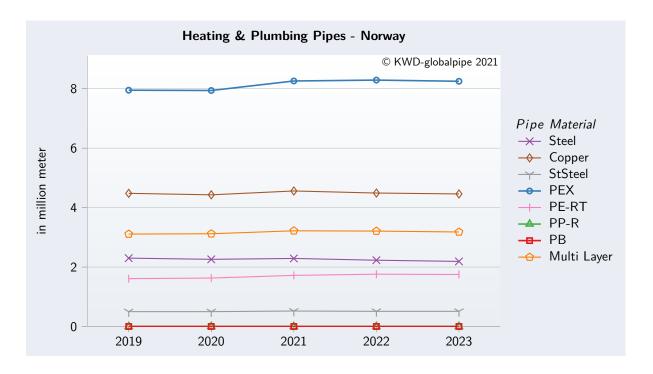
#### **Radiator Connection - Norway**



#### Sanitary / Hot & Cold Water Systems - Norway



#### Heating & Plumbing Pipes - Norway



## 3.14 Poland (tables and charts)

## Floor Heating / Surface Heating & Cooling - Poland

S .	Year	1	Metal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	0.00	0.80	0.00	2.91	7.67	0.00	0.00	1.65	0.80	10.58	13.03
_	2020	0.00	0.96	0.00	3.49	9.31	0.00	0.00	1.88	0.96	12.80	15.64
_	2021	0.00	1.01	0.00	3.67	9.83	0.00	0.00	1.93	1.01	13.50	16.44
	2022	0.00	1.02	0.00	3.73	10.01	0.00	0.00	1.95	1.02	13.74	16.71
on ears	2023	0.00	1.08	0.00	3.95	10.64	0.00	0.00	2.01	1.08	14.59	17.68
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	20.00	_	19.93	21.38	_	_	13.94	20.00	20.98	20.03
o o	2021	-	5.21	-	5.16	5.59	_	-	2.66	5.21	5.47	5.12
o, U	2022	_	0.99	_	1.63	1.83	_	_	1.04	0.99	1.78	1.64
υ U	2023	-	5.88	-	5.90	6.29	-	-	3.08	5.88	6.19	5.80
Share	2019	0.00	6.14	0.00	22.33	58.86	0.00	0.00	12.66	6.14	81.20	100.00
	2020	0.00	6.14	0.00	22.31	59.53	0.00	0.00	12.02	6.14	81.84	100.00
Market	2021	0.00	6.14	0.00	22.32	59.79	0.00	0.00	11.74	6.14	82.12	100.00
	2022	0.00	6.10	0.00	22.32	59.90	0.00	0.00	11.67	6.10	82.23	100.00
%	2023	0.00	6.11	0.00	22.34	60.18	0.00	0.00	11.37	6.11	82.52	100.00

#### Radiator Connection - Poland

SIS	Year	N	/letal-Pip	es		Plastic	-Pipes		Multi	To	tals	Total
Pipes in Iion Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipe Million	2019	8.66	11.91	0.00	1.60	0.51	1.88	0.19	9.40	20.57	4.18	34.15
≣	2020	9.10	12.51	0.00	1.67	0.55	1.98	0.20	9.88	21.61	4.40	35.89
_	2021	9.02	12.39	0.00	1.65	0.55	1.96	0.20	9.79	21.41	4.36	35.56
	2022	9.00	12.37	0.00	1.65	0.55	1.96	0.20	9.77	21.37	4.36	35.50
ge on Years	2023	8.82	12.12	0.00	1.61	0.54	1.92	0.19	9.57	20.94	4.26	34.77
% Change or Previous Year	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	5.08	5.04	_	4.37	7.84	5.32	5.26	5.11	5.06	5.26	5.10
	2021	-0.88	-0.96	-	-1.20	0.00	-1.01	0.00	-0.91	-0.93	-0.91	-0.92
۰, <del>۲</del>	2022	-0.22	-0.16	_	0.00	0.00	0.00	0.00	-0.20	-0.19	0.00	-0.17
υ	2023	-2.00	-2.02	-	-2.42	-1.82	-2.04	-5.00	-2.05	-2.01	-2.29	-2.06
Market Share	2019	25.36	34.88	0.00	4.69	1.49	5.51	0.56	27.53	60.23	12.24	100.00
	2020	25.36	34.86	0.00	4.65	1.53	5.52	0.56	27.53	60.21	12.26	100.00
	2021	25.37	34.84	0.00	4.64	1.55	5.51	0.56	27.53	60.21	12.26	100.00
	2022	25.35	34.85	0.00	4.65	1.55	5.52	0.56	27.52	60.20	12.28	100.00
%	2023	25.37	34.86	0.00	4.63	1.55	5.52	0.55	27.52	60.22	12.25	100.00

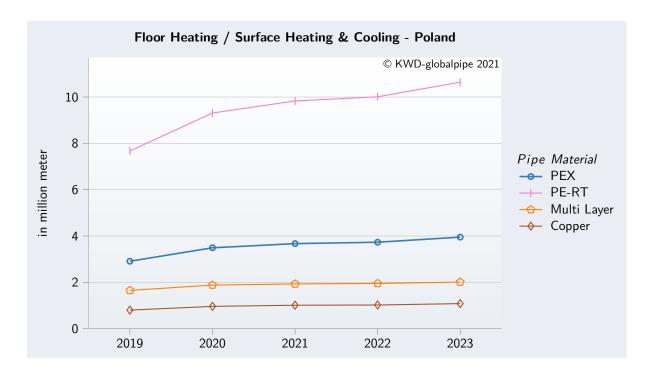
## Sanitary / Hot & Cold Water Systems - Poland

SIS	Year	N	∕letal-Pip	es		Plastic-	Pipes		Multi	То	tals	Total
ss in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	2.44	9.89	0.12	4.07	0.79	8.56	0.34	8.82	12.45	13.76	35.03
_ ≣	2020	2.52	10.59	0.13	4.33	0.87	9.23	0.37	9.47	13.24	14.80	37.51
_	2021	2.41	10.68	0.14	4.35	0.88	9.32	0.37	9.56	13.23	14.92	37.71
	2022	2.29	10.65	0.15	4.33	0.89	9.31	0.37	9.56	13.09	14.90	37.55
ge on Years	2023	2.24	10.75	0.16	4.36	0.90	9.40	0.37	9.66	13.15	15.03	37.84
% Change or Previous Year	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	3.28	7.08	8.33	6.39	10.13	7.83	8.82	7.37	6.35	7.56	7.08
	2021	-4.37	0.85	7.69	0.46	1.15	0.98	0.00	0.95	-0.08	0.81	0.53
۰, <del>۳</del>	2022	-4.98	-0.28	7.14	-0.46	1.14	-0.11	0.00	0.00	-1.06	-0.13	-0.42
υ	2023	-2.18	0.94	6.67	0.69	1.12	0.97	0.00	1.05	0.46	0.87	0.77
Share	2019	6.97	28.23	0.34	11.62	2.26	24.44	0.97	25.18	35.54	39.28	100.00
Market	2020	6.72	28.23	0.35	11.54	2.32	24.61	0.99	25.25	35.30	39.46	100.00
	2021	6.39	28.32	0.37	11.54	2.33	24.71	0.98	25.35	35.08	39.57	100.00
	2022	6.10	28.36	0.40	11.53	2.37	24.79	0.99	25.46	34.86	39.68	100.00
%	2023	5.92	28.41	0.42	11.52	2.38	24.84	0.98	25.53	34.75	39.72	100.00

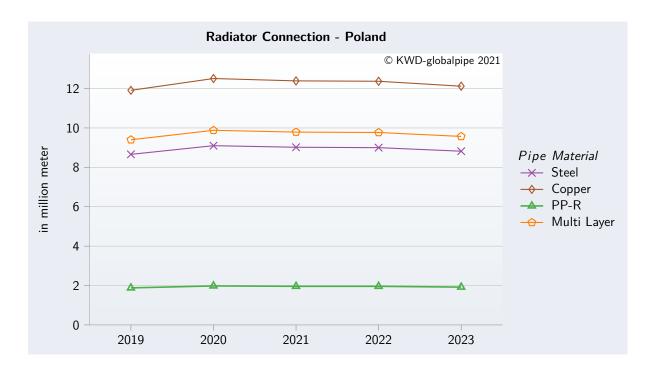
## Heating & Plumbing Pipes - Poland

SrS	Year	N	∕letal-Pip	es		Plastic	-Pipes		Multi	То	tals	Total
es in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	11.10	22.60	0.12	8.58	8.97	10.44	0.53	19.87	33.82	28.52	82.21
_ ≣	2020	11.62	24.06	0.13	9.49	10.73	11.21	0.57	21.23	35.81	32.00	89.04
_	2021	11.43	24.08	0.14	9.67	11.26	11.28	0.57	21.28	35.65	32.78	89.71
	2022	11.29	24.04	0.15	9.71	11.45	11.27	0.57	21.28	35.48	33.00	89.76
ge on Years	2023	11.06	23.95	0.16	9.92	12.08	11.32	0.56	21.24	35.17	33.88	90.29
% Change Previous Ye	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	4.68	6.46	8.33	10.61	19.62	7.38	7.55	6.84	5.88	12.20	8.31
% O	2021	-1.64	0.08	7.69	1.90	4.94	0.62	0.00	0.24	-0.45	2.44	0.75
o, Ф	2022	-1.22	-0.17	7.14	0.41	1.69	-0.09	0.00	0.00	-0.48	0.67	0.06
Φ	2023	-2.04	-0.37	6.67	2.16	5.50	0.44	-1.75	-0.19	-0.87	2.67	0.59
Share	2019	13.50	27.49	0.15	10.44	10.91	12.70	0.64	24.17	41.14	34.69	100.00
	2020	13.05	27.02	0.15	10.66	12.05	12.59	0.64	23.84	40.22	35.94	100.00
Market	2021	12.74	26.84	0.16	10.78	12.55	12.57	0.64	23.72	39.74	36.54	100.00
	2022	12.58	26.78	0.17	10.82	12.76	12.56	0.64	23.71	39.53	36.76	100.00
%	2023	12.25	26.53	0.18	10.99	13.38	12.54	0.62	23.52	38.95	37.52	100.00

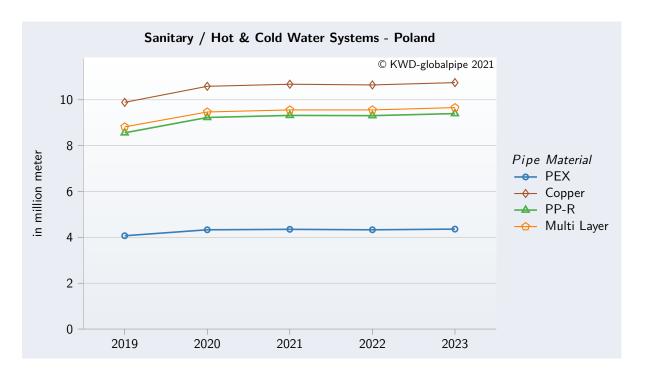
#### Floor Heating / Surface Heating & Cooling - Poland



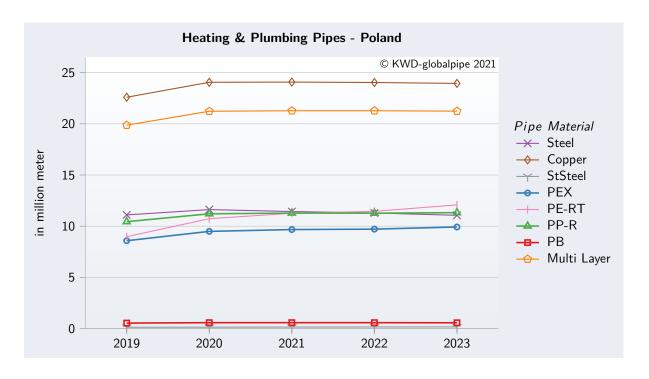
#### Radiator Connection - Poland



### Sanitary / Hot & Cold Water Systems - Poland



Heating & Plumbing Pipes - Poland



## 3.15 Portugal (tables and charts)

## Floor Heating / Surface Heating & Cooling - Portugal

SI	Year	ا	Metal-Pip	es		Plastic-	Pipes		Multi	To	otals	Total
Pipes in Million Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
ipe ion	2019	0.00	0.00	0.00	0.71	0.35	0.00	0.00	0.02	0.00	1.06	1.08
_ <u>=</u> =	2020	0.00	0.00	0.00	0.84	0.41	0.00	0.00	0.02	0.00	1.25	1.27
_	2021	0.00	0.00	0.00	1.03	0.50	0.00	0.00	0.03	0.00	1.53	1.56
	2022	0.00	0.00	0.00	1.04	0.50	0.00	0.00	0.03	0.00	1.54	1.57
on ears	2023	0.00	0.00	0.00	1.12	0.54	0.00	0.00	0.03	0.00	1.66	1.69
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	_	_	18.31	17.14	_	_	0.00	_	17.92	17.59
% C	2021	-	-	_	22.62	21.95	-	-	50.00	-	22.40	22.83
o, U	2022	_	_	_	0.97	0.00	_	_	0.00	_	0.65	0.64
υ U	2023	-	-	-	7.69	8.00	-	-	0.00	_	7.79	7.64
Share	2019	0.00	0.00	0.00	65.74	32.41	0.00	0.00	1.85	0.00	98.15	100.00
	2020	0.00	0.00	0.00	66.14	32.28	0.00	0.00	1.57	0.00	98.43	100.00
Market	2021	0.00	0.00	0.00	66.03	32.05	0.00	0.00	1.92	0.00	98.08	100.00
	2022	0.00	0.00	0.00	66.24	31.85	0.00	0.00	1.91	0.00	98.09	100.00
%	2023	0.00	0.00	0.00	66.27	31.95	0.00	0.00	1.78	0.00	98.22	100.00

## Radiator Connection - Portugal

ers	Year	ľ	Metal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
Pipes in Iion Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipe Million	2019	1.06	1.37	0.00	0.83	0.03	0.00	0.00	1.52	2.43	0.86	4.81
≣	2020	1.10	1.43	0.00	0.87	0.03	0.00	0.00	1.60	2.53	0.90	5.03
_	2021	1.14	1.47	0.00	0.89	0.03	0.00	0.00	1.65	2.61	0.92	5.18
	2022	1.14	1.47	0.00	0.89	0.03	0.00	0.00	1.65	2.61	0.92	5.18
ge on Years	2023	1.15	1.48	0.00	0.90	0.03	0.00	0.00	1.66	2.63	0.93	5.22
% Change or Previous Year	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	3.77	4.38	_	4.82	0.00	_	-	5.26	4.12	4.65	4.57
	2021	3.64	2.80	-	2.30	0.00	-	-	3.12	3.16	2.22	2.98
۰, <del>Մ</del>	2022	0.00	0.00	_	0.00	0.00	_	-	0.00	0.00	0.00	0.00
υ	2023	0.88	0.68	-	1.12	0.00	-	-	0.61	0.77	1.09	0.77
Market Share	2019	22.04	28.48	0.00	17.26	0.62	0.00	0.00	31.60	50.52	17.88	100.00
	2020	21.87	28.43	0.00	17.30	0.60	0.00	0.00	31.81	50.30	17.89	100.00
	2021	22.01	28.38	0.00	17.18	0.58	0.00	0.00	31.85	50.39	17.76	100.00
	2022	22.01	28.38	0.00	17.18	0.58	0.00	0.00	31.85	50.39	17.76	100.00
%	2023	22.03	28.35	0.00	17.24	0.57	0.00	0.00	31.80	50.38	17.82	100.00

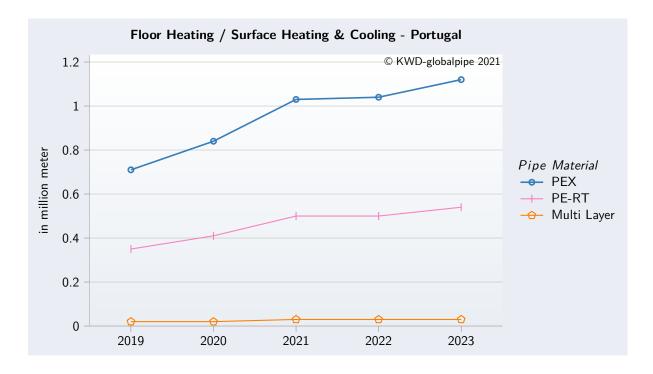
## Sanitary / Hot & Cold Water Systems - Portugal

SIS	Year	N	∕letal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
ss in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
	2019	0.20	1.54	0.16	0.83	0.01	1.07	0.08	1.04	1.90	1.99	4.93
Pipe Million	2020	0.21	1.64	0.17	0.88	0.01	1.14	0.08	1.11	2.02	2.11	5.24
_	2021	0.21	1.72	0.18	0.93	0.01	1.21	0.09	1.17	2.11	2.24	5.52
	2022	0.20	1.73	0.18	0.94	0.01	1.22	0.09	1.17	2.11	2.26	5.54
ge on Years	2023	0.20	1.76	0.18	0.96	0.01	1.25	0.09	1.19	2.14	2.31	5.64
% Change or Previous Yes	2019	_	_	_	_	_	-	-	_	_	_	_
	2020	5.00	6.49	6.25	6.02	0.00	6.54	0.00	6.73	6.32	6.03	6.29
	2021	0.00	4.88	5.88	5.68	0.00	6.14	12.50	5.41	4.46	6.16	5.34
۰, <del>۳</del>	2022	-4.76	0.58	0.00	1.08	0.00	0.83	0.00	0.00	0.00	0.89	0.36
υ	2023	0.00	1.73	0.00	2.13	0.00	2.46	0.00	1.71	1.42	2.21	1.81
Share	2019	4.06	31.24	3.25	16.84	0.20	21.70	1.62	21.10	38.54	40.37	100.00
	2020	4.01	31.30	3.24	16.79	0.19	21.76	1.53	21.18	38.55	40.27	100.00
Market	2021	3.80	31.16	3.26	16.85	0.18	21.92	1.63	21.20	38.22	40.58	100.00
	2022	3.61	31.23	3.25	16.97	0.18	22.02	1.62	21.12	38.09	40.79	100.00
%	2023	3.55	31.21	3.19	17.02	0.18	22.16	1.60	21.10	37.94	40.96	100.00

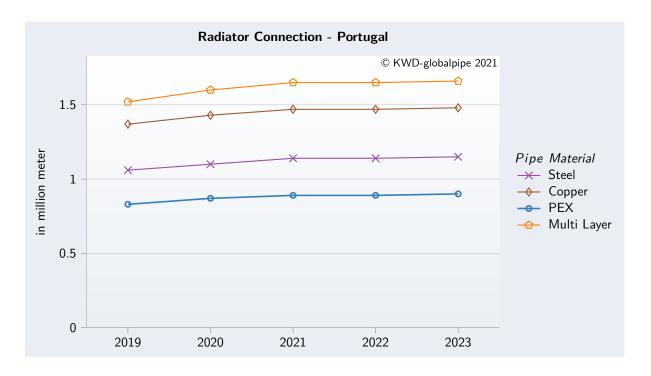
#### Heating & Plumbing Pipes - Portugal

SI	Year	N	∕letal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	1.26	2.91	0.16	2.37	0.39	1.07	0.08	2.58	4.33	3.91	10.82
_ ≣	2020	1.31	3.07	0.17	2.59	0.45	1.14	0.08	2.73	4.55	4.26	11.54
~	2021	1.35	3.19	0.18	2.85	0.54	1.21	0.09	2.85	4.72	4.69	12.26
	2022	1.34	3.20	0.18	2.87	0.54	1.22	0.09	2.85	4.72	4.72	12.29
ge on Years	2023	1.35	3.24	0.18	2.98	0.58	1.25	0.09	2.88	4.77	4.90	12.55
% Change or Previous Year	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	3.97	5.50	6.25	9.28	15.38	6.54	0.00	5.81	5.08	8.95	6.65
% C	2021	3.05	3.91	5.88	10.04	20.00	6.14	12.50	4.40	3.74	10.09	6.24
۰, <del>Մ</del>	2022	-0.74	0.31	0.00	0.70	0.00	0.83	0.00	0.00	0.00	0.64	0.24
υ	2023	0.75	1.25	0.00	3.83	7.41	2.46	0.00	1.05	1.06	3.81	2.12
Share	2019	11.65	26.89	1.48	21.90	3.60	9.89	0.74	23.84	40.02	36.14	100.00
	2020	11.35	26.60	1.47	22.44	3.90	9.88	0.69	23.66	39.43	36.92	100.00
Market	2021	11.01	26.02	1.47	23.25	4.40	9.87	0.73	23.25	38.50	38.25	100.00
	2022	10.90	26.04	1.46	23.35	4.39	9.93	0.73	23.19	38.41	38.41	100.00
%	2023	10.76	25.82	1.43	23.75	4.62	9.96	0.72	22.95	38.01	39.04	100.00

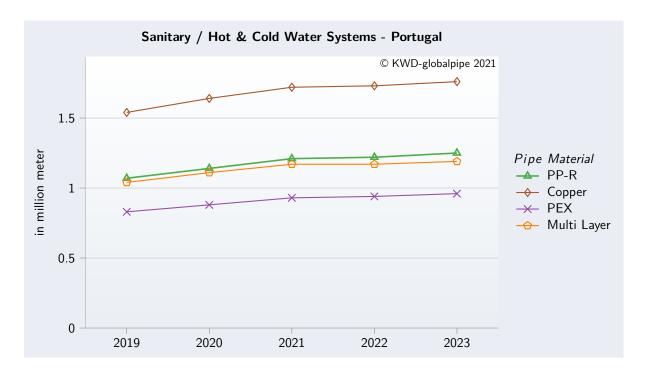
#### Floor Heating / Surface Heating & Cooling - Portugal



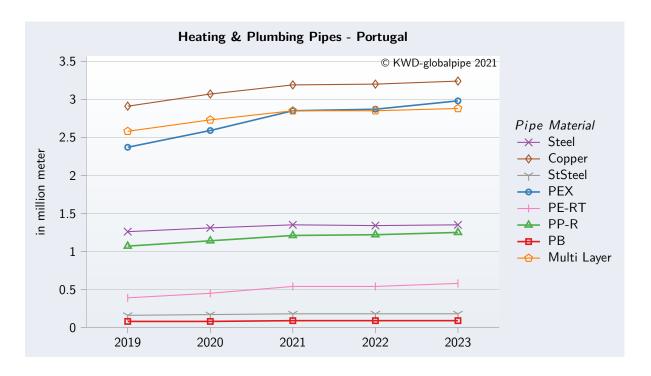
#### Radiator Connection - Portugal



### Sanitary / Hot & Cold Water Systems - Portugal



Heating & Plumbing Pipes - Portugal



## 3.16 Slovakia (tables and charts)

## Floor Heating / Surface Heating & Cooling - Slovakia

S	Year	М	etal-Pipe	:S		Plastic-	Pipes		Multi	Tot	als	Total
Pipes in Ion Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipe Million	2019	0.02	0.00	0.00	0.53	0.70	0.00	0.00	0.11	0.02	1.23	1.36
_ ≣	2020	0.02	0.00	0.00	0.57	0.75	0.00	0.00	0.12	0.02	1.32	1.46
_	2021	0.01	0.00	0.00	0.61	0.80	0.00	0.00	0.13	0.01	1.41	1.55
	2022	0.01	0.00	0.00	0.65	0.86	0.00	0.00	0.14	0.01	1.51	1.66
ge on Years	2023	0.00	0.00	0.00	0.68	0.90	0.00	0.00	0.15	0.00	1.58	1.73
% Change or Previous Yes	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	0.00	_	_	7.55	7.14	_	_	9.09	0.00	7.32	7.35
	2021	-50.00	-	_	7.02	6.67	-	-	8.33	-50.00	6.82	6.16
o, T	2022	0.00	_	_	6.56	7.50	_	_	7.69	0.00	7.09	7.10
Φ	2023	-100.00	-	-	4.62	4.65	-	-	7.14	-100.00	4.64	4.22
Share	2019	1.47	0.00	0.00	38.97	51.47	0.00	0.00	8.09	1.47	90.44	100.00
<del>5</del> 5	2020	1.37	0.00	0.00	39.04	51.37	0.00	0.00	8.22	1.37	90.41	100.00
Market	2021	0.65	0.00	0.00	39.35	51.61	0.00	0.00	8.39	0.65	90.97	100.00
	2022	0.60	0.00	0.00	39.16	51.81	0.00	0.00	8.43	0.60	90.96	100.00
%	2023	0.00	0.00	0.00	39.31	52.02	0.00	0.00	8.67	0.00	91.33	100.00

#### Radiator Connection - Slovakia

Srs	Year	N	/letal-Pip	es		Plastic-l	Pipes		Multi	То	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes in Million Met	2019	0.65	0.69	0.00	0.27	0.00	0.10	0.00	1.58	1.34	0.37	3.29
_ ≣	2020	0.64	0.68	0.00	0.26	0.00	0.10	0.00	1.56	1.32	0.36	3.24
_	2021	0.63	0.67	0.00	0.26	0.00	0.10	0.00	1.55	1.30	0.36	3.21
	2022	0.63	0.67	0.00	0.26	0.00	0.10	0.00	1.56	1.30	0.36	3.22
ge on Years	2023	0.64	0.68	0.00	0.26	0.00	0.10	0.00	1.57	1.32	0.36	3.25
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-1.54	-1.45	_	-3.70	_	0.00	-	-1.27	-1.49	-2.70	-1.52
	2021	-1.56	-1.47	-	0.00	-	0.00	-	-0.64	-1.52	0.00	-0.93
o, Ф	2022	0.00	0.00	_	0.00	_	0.00	-	0.65	0.00	0.00	0.31
Φ	2023	1.59	1.49	-	0.00	-	0.00	-	0.64	1.54	0.00	0.93
Share	2019	19.76	20.97	0.00	8.21	0.00	3.04	0.00	48.02	40.73	11.25	100.00
Market	2020	19.75	20.99	0.00	8.02	0.00	3.09	0.00	48.15	40.74	11.11	100.00
	2021	19.63	20.87	0.00	8.10	0.00	3.12	0.00	48.29	40.50	11.21	100.00
	2022	19.57	20.81	0.00	8.07	0.00	3.11	0.00	48.45	40.37	11.18	100.00
%	2023	19.69	20.92	0.00	8.00	0.00	3.08	0.00	48.31	40.62	11.08	100.00

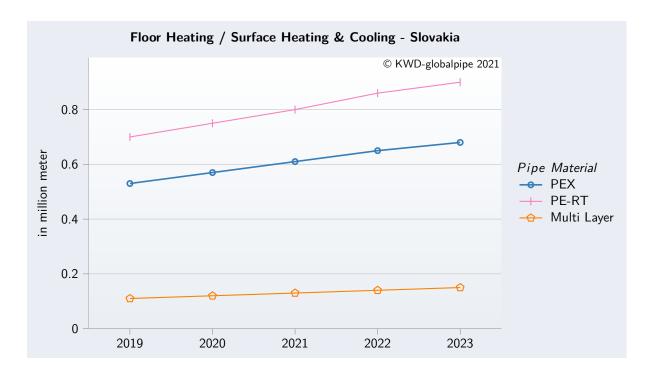
## Sanitary / Hot & Cold Water Systems - Slovakia

ers	Year	N	/letal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Iion M	2019	0.35	0.58	0.00	0.31	0.24	1.15	0.07	0.94	0.93	1.77	3.64
Pip. Million	2020	0.34	0.58	0.00	0.31	0.24	1.16	0.07	0.96	0.92	1.78	3.66
_	2021	0.33	0.59	0.00	0.32	0.24	1.17	0.07	0.99	0.92	1.80	3.71
	2022	0.31	0.60	0.00	0.32	0.24	1.18	0.07	1.01	0.91	1.81	3.73
on ears	2023	0.30	0.61	0.00	0.33	0.24	1.20	0.07	1.02	0.91	1.84	3.77
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-2.86	0.00	_	0.00	0.00	0.87	0.00	2.13	-1.08	0.56	0.55
	2021	-2.94	1.72	-	3.23	0.00	0.86	0.00	3.12	0.00	1.12	1.37
۰, ۳	2022	-6.06	1.69	_	0.00	0.00	0.85	0.00	2.02	-1.09	0.56	0.54
Φ	2023	-3.23	1.67	-	3.12	0.00	1.69	0.00	0.99	0.00	1.66	1.07
Share	2019	9.62	15.93	0.00	8.52	6.59	31.59	1.92	25.82	25.55	48.63	100.00
	2020	9.29	15.85	0.00	8.47	6.56	31.69	1.91	26.23	25.14	48.63	100.00
Market	2021	8.89	15.90	0.00	8.63	6.47	31.54	1.89	26.68	24.80	48.52	100.00
	2022	8.31	16.09	0.00	8.58	6.43	31.64	1.88	27.08	24.40	48.53	100.00
%	2023	7.96	16.18	0.00	8.75	6.37	31.83	1.86	27.06	24.14	48.81	100.00

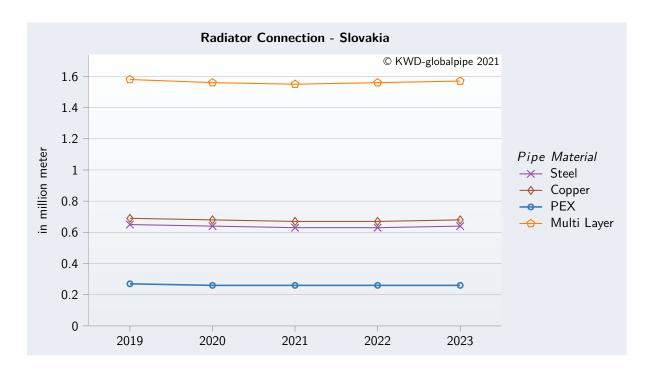
## Heating & Plumbing Pipes - Slovakia

S	Year	N	/letal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
Pipes in Million Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Iion M	2019	1.02	1.27	0.00	1.11	0.94	1.25	0.07	2.63	2.29	3.37	8.29
<u>_</u> ≝	2020	1.00	1.26	0.00	1.14	0.99	1.26	0.07	2.64	2.26	3.46	8.36
_	2021	0.97	1.26	0.00	1.19	1.04	1.27	0.07	2.67	2.23	3.57	8.47
	2022	0.95	1.27	0.00	1.23	1.10	1.28	0.07	2.71	2.22	3.68	8.61
ge on Years	2023	0.94	1.29	0.00	1.27	1.14	1.30	0.07	2.74	2.23	3.78	8.75
% Change o	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-1.96	-0.79	_	2.70	5.32	0.80	0.00	0.38	-1.31	2.67	0.84
% C	2021	-3.00	0.00	-	4.39	5.05	0.79	0.00	1.14	-1.33	3.18	1.32
o, U	2022	-2.06	0.79	-	3.36	5.77	0.79	0.00	1.50	-0.45	3.08	1.65
υ	2023	-1.05	1.57	-	3.25	3.64	1.56	0.00	1.11	0.45	2.72	1.63
Share	2019	12.30	15.32	0.00	13.39	11.34	15.08	0.84	31.72	27.62	40.65	100.00
£ 5	2020	11.96	15.07	0.00	13.64	11.84	15.07	0.84	31.58	27.03	41.39	100.00
Market	2021	11.45	14.88	0.00	14.05	12.28	14.99	0.83	31.52	26.33	42.15	100.00
	2022	11.03	14.75	0.00	14.29	12.78	14.87	0.81	31.48	25.78	42.74	100.00
%	2023	10.74	14.74	0.00	14.51	13.03	14.86	0.80	31.31	25.49	43.20	100.00

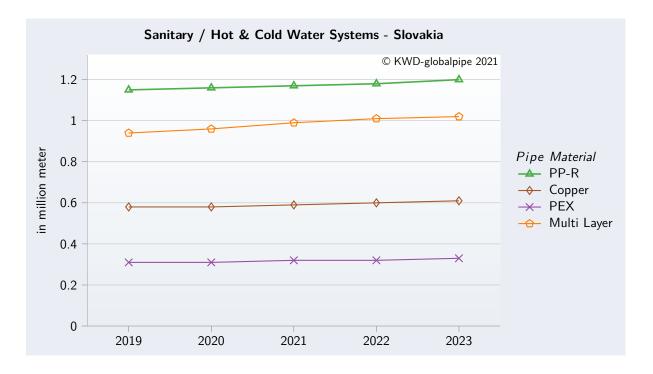
#### Floor Heating / Surface Heating & Cooling - Slovakia



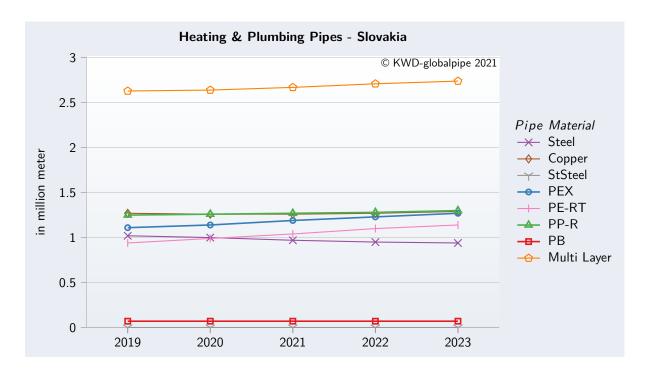
#### Radiator Connection - Slovakia



### Sanitary / Hot & Cold Water Systems - Slovakia



Heating & Plumbing Pipes - Slovakia



## 3.17 Spain (tables and charts)

## Floor Heating / Surface Heating & Cooling - Spain

S.	Year	1	Metal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
	2019	0.00	0.03	0.00	6.49	5.72	0.00	0.05	1.14	0.03	12.26	13.43
Pipe Million	2020	0.00	0.03	0.00	6.63	5.84	0.00	0.05	1.17	0.03	12.52	13.72
_	2021	0.00	0.03	0.00	7.09	6.27	0.00	0.06	1.25	0.03	13.42	14.70
	2022	0.00	0.03	0.00	7.40	6.56	0.00	0.06	1.30	0.03	14.02	15.35
ge on Years	2023	0.00	0.03	0.00	7.85	6.96	0.00	0.06	1.38	0.03	14.87	16.28
ıge s Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Change Previous Ye	2020	_	0.00	_	2.16	2.10	_	0.00	2.63	0.00	2.12	2.16
	2021	-	0.00	-	6.94	7.36	-	20.00	6.84	0.00	7.19	7.14
o,	2022	_	0.00	-	4.37	4.63	_	0.00	4.00	0.00	4.47	4.42
Φ	2023	-	0.00	-	6.08	6.10	-	0.00	6.15	0.00	6.06	6.06
Share	2019	0.00	0.22	0.00	48.32	42.59	0.00	0.37	8.49	0.22	91.29	100.00
Market	2020	0.00	0.22	0.00	48.32	42.57	0.00	0.36	8.53	0.22	91.25	100.00
	2021	0.00	0.20	0.00	48.23	42.65	0.00	0.41	8.50	0.20	91.29	100.00
	2022	0.00	0.20	0.00	48.21	42.74	0.00	0.39	8.47	0.20	91.34	100.00
%	2023	0.00	0.18	0.00	48.22	42.75	0.00	0.37	8.48	0.18	91.34	100.00

## Radiator Connection - Spain

SIS	Year	N	/letal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
Pipes in Iion Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipe Million	2019	2.09	2.89	0.00	1.48	0.23	0.00	0.23	13.57	4.98	1.94	20.49
_ ≣	2020	1.98	2.75	0.00	1.40	0.21	0.00	0.21	12.90	4.73	1.82	19.45
_	2021	1.98	2.74	0.00	1.40	0.21	0.00	0.21	12.88	4.72	1.82	19.42
	2022	2.02	2.79	0.00	1.42	0.21	0.00	0.21	13.10	4.81	1.84	19.75
ge on Years	2023	2.04	2.82	0.00	1.44	0.21	0.00	0.21	13.26	4.86	1.86	19.98
ıge s Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Change Previous Ye	2020	-5.26	-4.84	_	-5.41	-8.70	_	-8.70	-4.94	-5.02	-6.19	-5.08
	2021	0.00	-0.36	-	0.00	0.00	-	0.00	-0.16	-0.21	0.00	-0.15
۰, <del>۲</del>	2022	2.02	1.82	_	1.43	0.00	_	0.00	1.71	1.91	1.10	1.70
υ	2023	0.99	1.08	-	1.41	0.00	-	0.00	1.22	1.04	1.09	1.16
Share	2019	10.20	14.10	0.00	7.22	1.12	0.00	1.12	66.23	24.30	9.47	100.00
Market	2020	10.18	14.14	0.00	7.20	1.08	0.00	1.08	66.32	24.32	9.36	100.00
	2021	10.20	14.11	0.00	7.21	1.08	0.00	1.08	66.32	24.30	9.37	100.00
	2022	10.23	14.13	0.00	7.19	1.06	0.00	1.06	66.33	24.35	9.32	100.00
%	2023	10.21	14.11	0.00	7.21	1.05	0.00	1.05	66.37	24.32	9.31	100.00

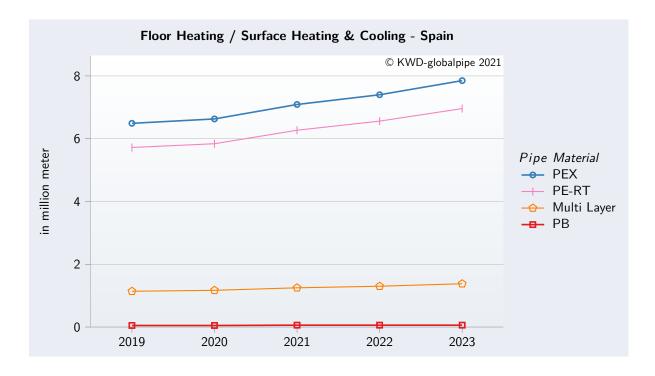
## Sanitary / Hot & Cold Water Systems - Spain

S	Year	N	/letal-Pip	es		Plastic-	-Pipes		Multi	То	tals	Total
ss in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
	2019	0.62	5.60	0.49	5.27	2.01	4.94	0.49	13.53	6.71	12.71	32.95
Pipe Million	2020	0.59	5.48	0.48	5.16	1.97	4.83	0.48	13.23	6.55	12.44	32.22
_	2021	0.59	5.62	0.49	5.30	2.02	4.96	0.49	13.59	6.70	12.77	33.06
	2022	0.59	5.77	0.50	5.45	2.08	5.10	0.50	13.98	6.86	13.13	33.97
ge on Years	2023	0.60	5.98	0.52	5.65	2.15	5.28	0.52	14.49	7.10	13.60	35.19
% Change or Previous Year	2019	_	_	_	-	_	_	_	_	_	_	_
	2020	-4.84	-2.14	-2.04	-2.09	-1.99	-2.23	-2.04	-2.22	-2.38	-2.12	-2.22
	2021	0.00	2.55	2.08	2.71	2.54	2.69	2.08	2.72	2.29	2.65	2.61
o,	2022	0.00	2.67	2.04	2.83	2.97	2.82	2.04	2.87	2.39	2.82	2.75
υ	2023	1.69	3.64	4.00	3.67	3.37	3.53	4.00	3.65	3.50	3.58	3.59
Share	2019	1.88	17.00	1.49	15.99	6.10	14.99	1.49	41.06	20.36	38.57	100.00
55	2020	1.83	17.01	1.49	16.01	6.11	14.99	1.49	41.06	20.33	38.61	100.00
Market	2021	1.78	17.00	1.48	16.03	6.11	15.00	1.48	41.11	20.27	38.63	100.00
	2022	1.74	16.99	1.47	16.04	6.12	15.01	1.47	41.15	20.19	38.65	100.00
%	2023	1.71	16.99	1.48	16.06	6.11	15.00	1.48	41.18	20.18	38.65	100.00

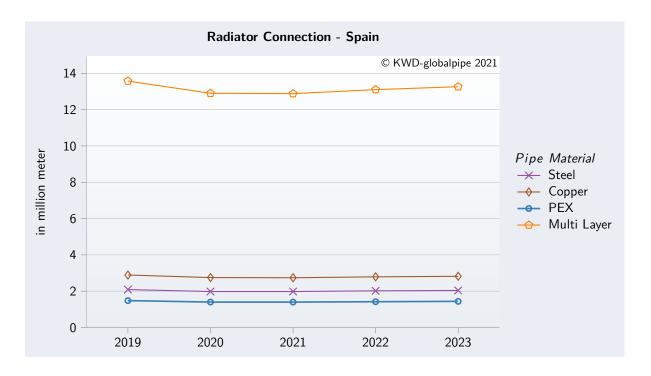
## Heating & Plumbing Pipes - Spain

STS	Year	N	∕letal-Pip	es		Plastic	-Pipes		Multi	То	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	2.71	8.52	0.49	13.24	7.96	4.94	0.77	28.24	11.72	26.91	66.87
_ ≣	2020	2.57	8.26	0.48	13.19	8.02	4.83	0.74	27.30	11.31	26.78	65.39
_	2021	2.57	8.39	0.49	13.79	8.50	4.96	0.76	27.72	11.45	28.01	67.18
	2022	2.61	8.59	0.50	14.27	8.85	5.10	0.77	28.38	11.70	28.99	69.07
ge on Years	2023	2.64	8.83	0.52	14.94	9.32	5.28	0.79	29.13	11.99	30.33	71.45
% Change or Previous Yes	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-5.17	-3.05	-2.04	-0.38	0.75	-2.23	-3.90	-3.33	-3.50	-0.48	-2.21
% C	2021	0.00	1.57	2.08	4.55	5.99	2.69	2.70	1.54	1.24	4.59	2.74
о, П	2022	1.56	2.38	2.04	3.48	4.12	2.82	1.32	2.38	2.18	3.50	2.81
Φ	2023	1.15	2.79	4.00	4.70	5.31	3.53	2.60	2.64	2.48	4.62	3.45
Share	2019	4.05	12.74	0.73	19.80	11.90	7.39	1.15	42.23	17.53	40.24	100.00
	2020	3.93	12.63	0.73	20.17	12.26	7.39	1.13	41.75	17.30	40.95	100.00
Market	2021	3.83	12.49	0.73	20.53	12.65	7.38	1.13	41.26	17.04	41.69	100.00
	2022	3.78	12.44	0.72	20.66	12.81	7.38	1.11	41.09	16.94	41.97	100.00
%	2023	3.69	12.36	0.73	20.91	13.04	7.39	1.11	40.77	16.78	42.45	100.00

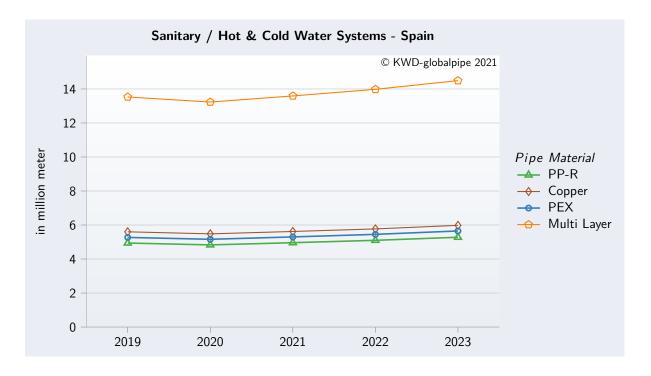
#### Floor Heating / Surface Heating & Cooling - Spain



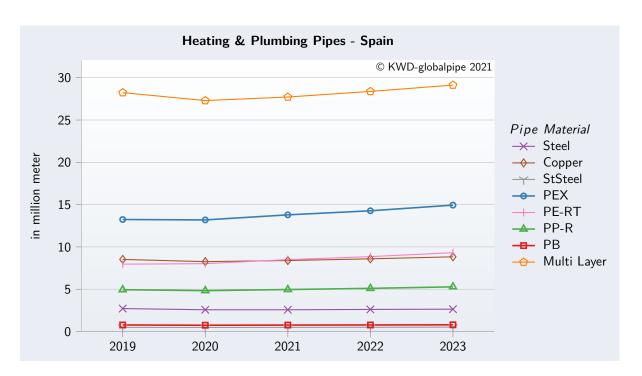
## Radiator Connection - Spain



### Sanitary / Hot & Cold Water Systems - Spain



## Heating & Plumbing Pipes - Spain



## 3.18 Sweden (tables and charts)

## Floor Heating / Surface Heating & Cooling - Sweden

STS	Year		Metal-Pip	es		Plastic-	Pipes		Multi	Tot	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	0.00	0.06	0.00	14.95	2.31	0.00	0.00	0.13	0.06	17.26	17.45
∰	2020	0.00	0.06	0.00	15.18	2.35	0.00	0.00	0.13	0.06	17.53	17.72
_	2021	0.00	0.05	0.00	15.22	2.35	0.00	0.00	0.14	0.05	17.57	17.76
	2022	0.00	0.06	0.00	16.74	2.59	0.00	0.00	0.15	0.06	19.33	19.54
ge on Years	2023	0.00	0.06	0.00	17.06	2.64	0.00	0.00	0.15	0.06	19.70	19.91
% Change or Previous Year	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	0.00	_	1.54	1.73	_	_	0.00	0.00	1.56	1.55
	2021	-	-16.67	-	0.26	0.00	-	-	7.69	-16.67	0.23	0.23
∘∕ ⊡	2022	_	20.00	-	9.99	10.21	_	-	7.14	20.00	10.02	10.02
υ	2023	-	0.00	-	1.91	1.93	-	-	0.00	0.00	1.91	1.89
Share	2019	0.00	0.34	0.00	85.67	13.24	0.00	0.00	0.74	0.34	98.91	100.00
	2020	0.00	0.34	0.00	85.67	13.26	0.00	0.00	0.73	0.34	98.93	100.00
Market	2021	0.00	0.28	0.00	85.70	13.23	0.00	0.00	0.79	0.28	98.93	100.00
	2022	0.00	0.31	0.00	85.67	13.25	0.00	0.00	0.77	0.31	98.93	100.00
%	2023	0.00	0.30	0.00	85.69	13.26	0.00	0.00	0.75	0.30	98.95	100.00

#### **Radiator Connection - Sweden**

S	Year	N	Лetal-Pip	es		Plastic-l	Pipes		Multi	То	tals	Total
es in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	2.58	3.93	0.00	1.20	0.00	0.00	0.00	2.37	6.51	1.20	10.08
_ ≣	2020	2.45	3.72	0.00	1.14	0.00	0.00	0.00	2.25	6.17	1.14	9.56
_	2021	2.45	3.72	0.00	1.14	0.00	0.00	0.00	2.25	6.17	1.14	9.56
	2022	2.62	3.98	0.00	1.21	0.00	0.00	0.00	2.40	6.60	1.21	10.21
% Change on Previous Years	2023	2.60	3.96	0.00	1.20	0.00	0.00	0.00	2.39	6.56	1.20	10.15
	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-5.04	-5.34	_	-5.00	_	_	_	-5.06	-5.22	-5.00	-5.16
	2021	0.00	0.00	-	0.00	-	-	-	0.00	0.00	0.00	0.00
۰, <del>۲</del>	2022	6.94	6.99	_	6.14	_	_	_	6.67	6.97	6.14	6.80
υ	2023	-0.76	-0.50	-	-0.83	-	-	-	-0.42	-0.61	-0.83	-0.59
Share	2019	25.60	38.99	0.00	11.90	0.00	0.00	0.00	23.51	64.58	11.90	100.00
Market	2020	25.63	38.91	0.00	11.92	0.00	0.00	0.00	23.54	64.54	11.92	100.00
	2021	25.63	38.91	0.00	11.92	0.00	0.00	0.00	23.54	64.54	11.92	100.00
	2022	25.66	38.98	0.00	11.85	0.00	0.00	0.00	23.51	64.64	11.85	100.00
%	2023	25.62	39.01	0.00	11.82	0.00	0.00	0.00	23.55	64.63	11.82	100.00

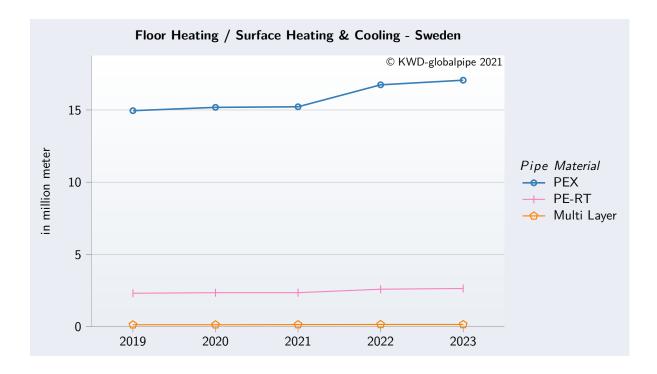
## Sanitary / Hot & Cold Water Systems - Sweden

SIS	Year	1	Metal-Pip	es		Plastic-l	Pipes		Multi	То	tals	Total
ss in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	0.00	2.91	0.66	4.89	0.10	0.00	0.05	3.74	3.57	5.04	12.35
∃ <u>≡</u>	2020	0.00	2.82	0.64	4.73	0.10	0.00	0.05	3.61	3.46	4.88	11.95
_	2021	0.00	2.84	0.64	4.77	0.10	0.00	0.05	3.64	3.48	4.92	12.04
	2022	0.00	3.03	0.69	5.10	0.10	0.00	0.05	3.91	3.72	5.25	12.88
ge on Years	2023	0.00	3.03	0.69	5.11	0.10	0.00	0.05	3.91	3.72	5.26	12.89
% Change or Previous Yes	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	-3.09	-3.03	-3.27	0.00	_	0.00	-3.48	-3.08	-3.17	-3.24
% C	2021	_	0.71	0.00	0.85	0.00	-	0.00	0.83	0.58	0.82	0.75
۰, <del>۳</del>	2022	_	6.69	7.81	6.92	0.00	_	0.00	7.42	6.90	6.71	6.98
Φ	2023	-	0.00	0.00	0.20	0.00	-	0.00	0.00	0.00	0.19	0.08
Share	2019	0.00	23.56	5.34	39.60	0.81	0.00	0.40	30.28	28.91	40.81	100.00
Market	2020	0.00	23.60	5.36	39.58	0.84	0.00	0.42	30.21	28.95	40.84	100.00
	2021	0.00	23.59	5.32	39.62	0.83	0.00	0.42	30.23	28.90	40.86	100.00
	2022	0.00	23.52	5.36	39.60	0.78	0.00	0.39	30.36	28.88	40.76	100.00
%	2023	0.00	23.51	5.35	39.64	0.78	0.00	0.39	30.33	28.86	40.81	100.00

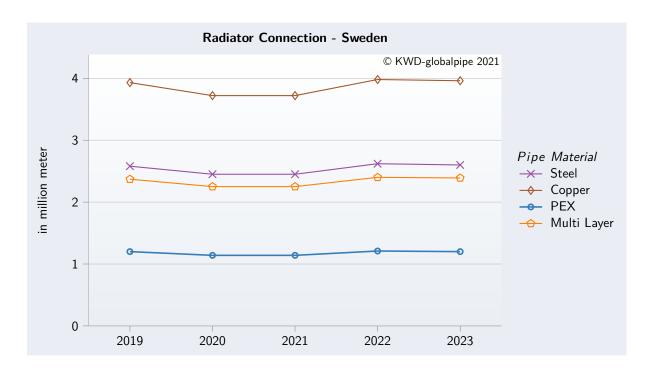
## Heating & Plumbing Pipes - Sweden

SIS	Year	N	∕letal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
es in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	2.58	6.90	0.66	21.04	2.41	0.00	0.05	6.24	10.14	23.50	39.88
_	2020	2.45	6.60	0.64	21.05	2.45	0.00	0.05	5.99	9.69	23.55	39.23
_	2021	2.45	6.61	0.64	21.13	2.45	0.00	0.05	6.03	9.70	23.63	39.36
	2022	2.62	7.07	0.69	23.05	2.69	0.00	0.05	6.46	10.38	25.79	42.63
se on Years	2023	2.60	7.05	0.69	23.37	2.74	0.00	0.05	6.45	10.34	26.16	42.95
% Change or Previous Yes	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-5.04	-4.35	-3.03	0.05	1.66	_	0.00	-4.01	-4.44	0.21	-1.63
% C	2021	0.00	0.15	0.00	0.38	0.00	-	0.00	0.67	0.10	0.34	0.33
٥, ٣	2022	6.94	6.96	7.81	9.09	9.80	_	0.00	7.13	7.01	9.14	8.31
υ	2023	-0.76	-0.28	0.00	1.39	1.86	-	0.00	-0.15	-0.39	1.43	0.75
Share	2019	6.47	17.30	1.65	52.76	6.04	0.00	0.13	15.65	25.43	58.93	100.00
Market	2020	6.25	16.82	1.63	53.66	6.25	0.00	0.13	15.27	24.70	60.03	100.00
	2021	6.22	16.79	1.63	53.68	6.22	0.00	0.13	15.32	24.64	60.04	100.00
	2022	6.15	16.58	1.62	54.07	6.31	0.00	0.12	15.15	24.35	60.50	100.00
%	2023	6.05	16.41	1.61	54.41	6.38	0.00	0.12	15.02	24.07	60.91	100.00

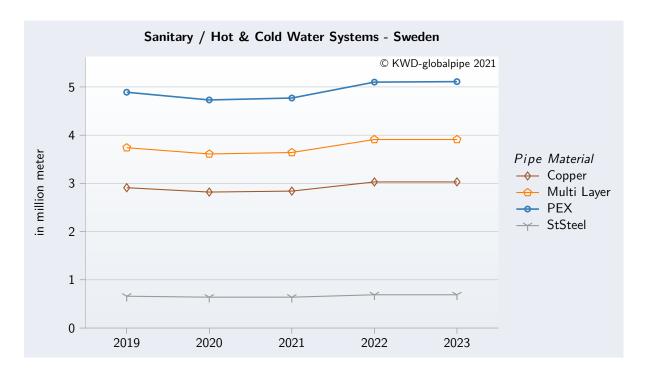
#### Floor Heating / Surface Heating & Cooling - Sweden



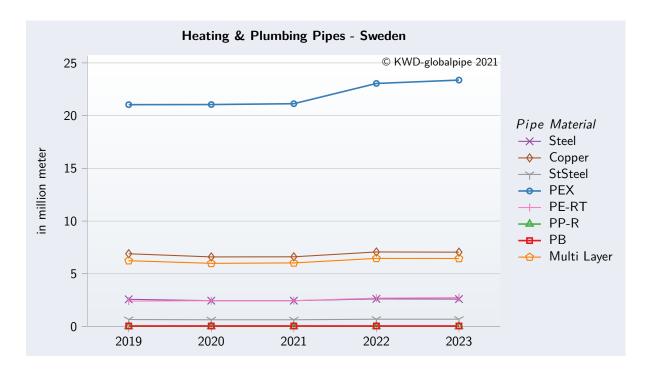
#### Radiator Connection - Sweden



### Sanitary / Hot & Cold Water Systems - Sweden



Heating & Plumbing Pipes - Sweden



## 3.19 Switzerland (tables and charts)

## Floor Heating / Surface Heating & Cooling - Switzerland

STS	Year	ı	Metal-Pip	es		Plastic-I	Pipes		Multi	To	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	0.00	0.05	0.00	1.45	0.11	0.00	0.09	13.45	0.05	1.65	15.15
_ ≣	2020	0.00	0.05	0.00	1.46	0.11	0.00	0.09	13.56	0.05	1.66	15.27
~	2021	0.00	0.05	0.00	1.49	0.11	0.00	0.09	13.84	0.05	1.69	15.58
	2022	0.00	0.05	0.00	1.48	0.11	0.00	0.09	13.72	0.05	1.68	15.45
ge on Years	2023	0.00	0.05	0.00	1.55	0.12	0.00	0.09	14.32	0.05	1.76	16.13
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	0.00	_	0.69	0.00	_	0.00	0.82	0.00	0.61	0.79
	2021	_	0.00	-	2.05	0.00	-	0.00	2.06	0.00	1.81	2.03
∘∕ ⊡	2022	_	0.00	-	-0.67	0.00	_	0.00	-0.87	0.00	-0.59	-0.83
Φ	2023	-	0.00	-	4.73	9.09	-	0.00	4.37	0.00	4.76	4.40
Share	2019	0.00	0.33	0.00	9.57	0.73	0.00	0.59	88.78	0.33	10.89	100.00
Market	2020	0.00	0.33	0.00	9.56	0.72	0.00	0.59	88.80	0.33	10.87	100.00
	2021	0.00	0.32	0.00	9.56	0.71	0.00	0.58	88.83	0.32	10.85	100.00
	2022	0.00	0.32	0.00	9.58	0.71	0.00	0.58	88.80	0.32	10.87	100.00
%	2023	0.00	0.31	0.00	9.61	0.74	0.00	0.56	88.78	0.31	10.91	100.00

#### Radiator Connection - Switzerland

S	Year		∕letal-Pip	es		Plastic	-Pipes		Multi	То	tals	Total
es in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	PB	layer	Metal	Plastics	
Pipes in Million Met	2019	1.13	0.43	0.00	0.68	0.00	0.00	0.04	4.18	1.56	0.72	6.46
_ ≣	2020	1.11	0.42	0.00	0.66	0.00	0.00	0.04	4.11	1.53	0.70	6.34
_	2021	1.10	0.42	0.00	0.65	0.00	0.00	0.04	4.09	1.52	0.69	6.30
	2022	1.03	0.40	0.00	0.61	0.00	0.00	0.03	3.83	1.43	0.64	5.90
ge on Years	2023	1.03	0.41	0.00	0.62	0.00	0.00	0.03	3.93	1.44	0.65	6.02
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-1.77	-2.33	_	-2.94	_	_	0.00	-1.67	-1.92	-2.78	-1.86
	2021	-0.90	0.00	-	-1.52	-	-	0.00	-0.49	-0.65	-1.43	-0.63
۰, <del>Մ</del>	2022	-6.36	-4.76	_	-6.15	_	_	-25.00	-6.36	-5.92	-7.25	-6.35
Φ	2023	0.00	2.50	-	1.64	-	-	0.00	2.61	0.70	1.56	2.03
Share	2019	17.49	6.66	0.00	10.53	0.00	0.00	0.62	64.71	24.15	11.15	100.00
Market Sh	2020	17.51	6.62	0.00	10.41	0.00	0.00	0.63	64.83	24.13	11.04	100.00
	2021	17.46	6.67	0.00	10.32	0.00	0.00	0.63	64.92	24.13	10.95	100.00
	2022	17.46	6.78	0.00	10.34	0.00	0.00	0.51	64.92	24.24	10.85	100.00
%	2023	17.11	6.81	0.00	10.30	0.00	0.00	0.50	65.28	23.92	10.80	100.00

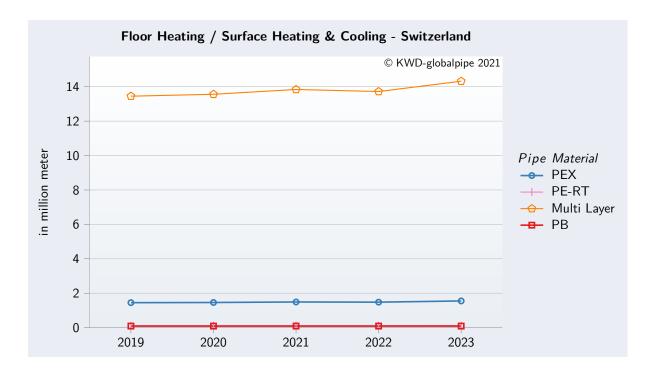
## Sanitary / Hot & Cold Water Systems - Switzerland

S .	Year	1	Metal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
es in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	0.00	0.19	1.18	3.40	0.00	0.00	1.03	6.15	1.37	4.43	11.95
_ ≣	2020	0.00	0.19	1.18	3.41	0.00	0.00	1.03	6.17	1.37	4.44	11.98
_	2021	0.00	0.19	1.19	3.42	0.00	0.00	1.04	6.21	1.38	4.46	12.05
	2022	0.00	0.19	1.15	3.31	0.00	0.00	1.01	6.03	1.34	4.32	11.69
ge on Years	2023	0.00	0.19	1.19	3.42	0.00	0.00	1.04	6.25	1.38	4.46	12.09
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	0.00	0.00	0.29	_	_	0.00	0.33	0.00	0.23	0.25
	2021	_	0.00	0.85	0.29	-	-	0.97	0.65	0.73	0.45	0.58
ە` <u>٦</u>	2022	_	0.00	-3.36	-3.22	-	-	-2.88	-2.90	-2.90	-3.14	-2.99
υ	2023	-	0.00	3.48	3.32	-	-	2.97	3.65	2.99	3.24	3.42
Share	2019	0.00	1.59	9.87	28.45	0.00	0.00	8.62	51.46	11.46	37.07	100.00
Market	2020	0.00	1.59	9.85	28.46	0.00	0.00	8.60	51.50	11.44	37.06	100.00
	2021	0.00	1.58	9.88	28.38	0.00	0.00	8.63	51.54	11.45	37.01	100.00
	2022	0.00	1.63	9.84	28.31	0.00	0.00	8.64	51.58	11.46	36.95	100.00
%	2023	0.00	1.57	9.84	28.29	0.00	0.00	8.60	51.70	11.41	36.89	100.00

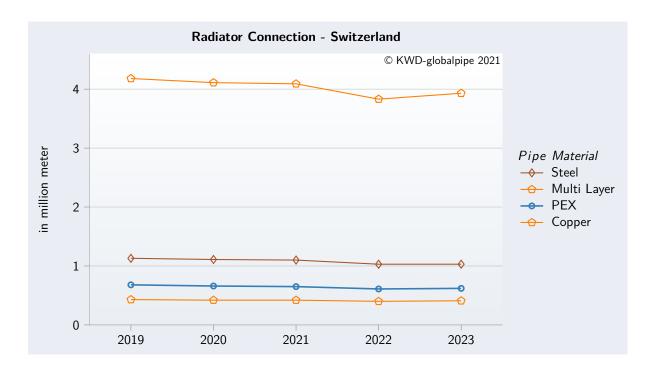
## Heating & Plumbing Pipes - Switzerland

ers.	Year	N	∕letal-Pip	es		Plastic-	Pipes		Multi	То	tals	Total
Pipes in Million Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes lion M	2019	1.13	0.67	1.18	5.53	0.11	0.00	1.16	23.78	2.98	6.80	33.56
_ ≣	2020	1.11	0.66	1.18	5.53	0.11	0.00	1.16	23.84	2.95	6.80	33.59
~	2021	1.10	0.66	1.19	5.56	0.11	0.00	1.17	24.14	2.95	6.84	33.93
	2022	1.03	0.64	1.15	5.40	0.11	0.00	1.13	23.58	2.82	6.64	33.04
ge on Years	2023	1.03	0.65	1.19	5.59	0.12	0.00	1.16	24.50	2.87	6.87	34.24
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-1.77	-1.49	0.00	0.00	0.00	_	0.00	0.25	-1.01	0.00	0.09
o »	2021	-0.90	0.00	0.85	0.54	0.00	_	0.86	1.26	0.00	0.59	1.01
۰, <del>Մ</del>	2022	-6.36	-3.03	-3.36	-2.88	0.00	_	-3.42	-2.32	-4.41	-2.92	-2.62
υ	2023	0.00	1.56	3.48	3.52	9.09	-	2.65	3.90	1.77	3.46	3.63
Share	2019	3.37	2.00	3.52	16.48	0.33	0.00	3.46	70.86	8.88	20.26	100.00
	2020	3.30	1.96	3.51	16.46	0.33	0.00	3.45	70.97	8.78	20.24	100.00
Market	2021	3.24	1.95	3.51	16.39	0.32	0.00	3.45	71.15	8.69	20.16	100.00
	2022	3.12	1.94	3.48	16.34	0.33	0.00	3.42	71.37	8.54	20.10	100.00
%	2023	3.01	1.90	3.48	16.33	0.35	0.00	3.39	71.55	8.38	20.06	100.00

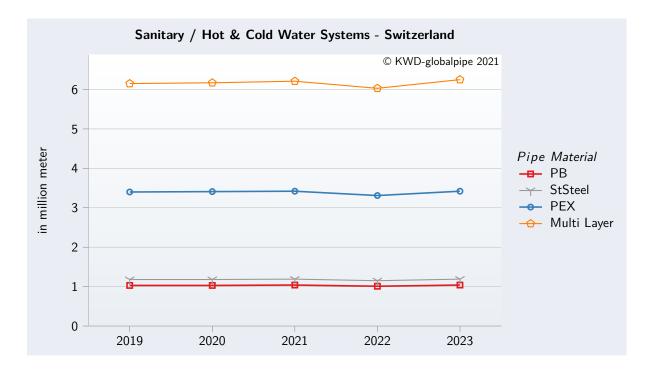
#### Floor Heating / Surface Heating & Cooling - Switzerland



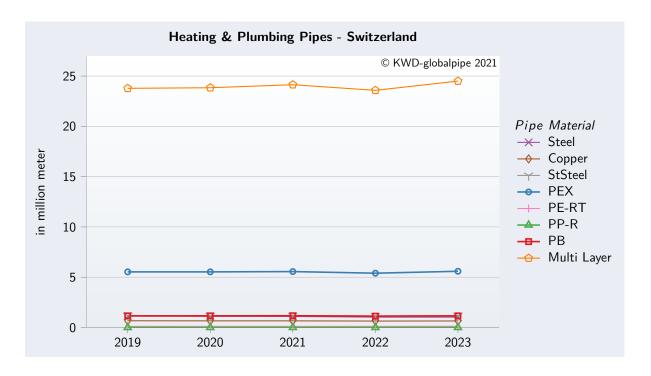
#### Radiator Connection - Switzerland



#### Sanitary / Hot & Cold Water Systems - Switzerland



Heating & Plumbing Pipes - Switzerland



# 4 European Overview of Heating & Plumbing Pipes

## 4.1 Consumption of Heating & Plumbing Pipes - Western Europe

Floor Heating / Surface Heating & Cooling - Western Europe

Countries: AUT, BEL, CHE, DEU, DNK, ESP, FRA, FIN, GBR, ITA, IRL, NOR, NLD, PRT, SWE

SIS	Year	1	Metal-Pip	es		Plastic	-Pipes		Multi	To	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	0.00	6.84	0.00	166.29	151.75	0.21	15.25	47.76	6.84	333.50	388.10
_ ≣	2020	0.00	6.83	0.00	165.25	153.71	0.20	13.62	47.67	6.83	332.78	387.28
_	2021	0.00	6.88	0.00	169.35	156.53	0.20	15.14	49.03	6.88	341.22	397.13
	2022	0.00	7.24	0.00	179.68	164.83	0.20	16.28	50.72	7.24	360.99	418.95
ge on Years	2023	0.00	7.47	0.00	185.74	169.35	0.20	17.06	52.37	7.47	372.35	432.19
% Change o	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-	-0.15	_	-0.63	1.29	-4.76	-10.69	-0.19	-0.15	-0.22	-0.21
	2021	-	0.73	-	2.48	1.83	0.00	11.16	2.85	0.73	2.54	2.54
۰, <del>۳</del>	2022	_	5.23	-	6.10	5.30	0.00	7.53	3.45	5.23	5.79	5.49
Φ	2023	-	3.18	-	3.37	2.74	0.00	4.79	3.25	3.18	3.15	3.16
Share	2019	0.00	1.76	0.00	42.85	39.10	0.05	3.93	12.31	1.76	85.93	100.00
st SF	2020	0.00	1.76	0.00	42.67	39.69	0.05	3.52	12.31	1.76	85.93	100.00
Market	2021	0.00	1.73	0.00	42.64	39.42	0.05	3.81	12.35	1.73	85.92	100.00
	2022	0.00	1.73	0.00	42.89	39.34	0.05	3.89	12.11	1.73	86.17	100.00
%	2023	0.00	1.73	0.00	42.98	39.18	0.05	3.95	12.12	1.73	86.15	100.00

#### Radiator Connection - Western Europe

S	Year	N	∕letal-Pip	es		Plastic	-Pipes		Multi	То	tals	Total
ss in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	43.34	150.87	0.00	28.06	3.86	0.42	6.65	99.65	194.21	38.99	332.85
_ ≣	2020	42.18	140.23	0.00	26.71	3.64	0.41	5.82	96.13	182.41	36.58	315.12
_	2021	42.00	141.85	0.00	26.36	3.63	0.41	6.13	95.74	183.85	36.53	316.12
	2022	42.33	143.49	0.00	26.31	3.63	0.42	6.27	96.49	185.82	36.63	318.94
ge on Years	2023	41.24	142.46	0.00	26.27	3.57	0.42	6.28	95.72	183.70	36.54	315.96
% Change or Previous Yes	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-2.68	-7.05	_	-4.81	-5.70	-2.38	-12.48	-3.53	-6.08	-6.18	-5.33
	2021	-0.43	1.16	-	-1.31	-0.27	0.00	5.33	-0.41	0.79	-0.14	0.32
o, T	2022	0.79	1.16	_	-0.19	0.00	2.44	2.28	0.78	1.07	0.27	0.89
υ	2023	-2.58	-0.72	-	-0.15	-1.65	0.00	0.16	-0.80	-1.14	-0.25	-0.93
Share	2019	13.02	45.33	0.00	8.43	1.16	0.13	2.00	29.94	58.35	11.71	100.00
Market	2020	13.39	44.50	0.00	8.48	1.16	0.13	1.85	30.51	57.89	11.61	100.00
	2021	13.29	44.87	0.00	8.34	1.15	0.13	1.94	30.29	58.16	11.56	100.00
	2022	13.27	44.99	0.00	8.25	1.14	0.13	1.97	30.25	58.26	11.48	100.00
%	2023	13.05	45.09	0.00	8.31	1.13	0.13	1.99	30.29	58.14	11.56	100.00

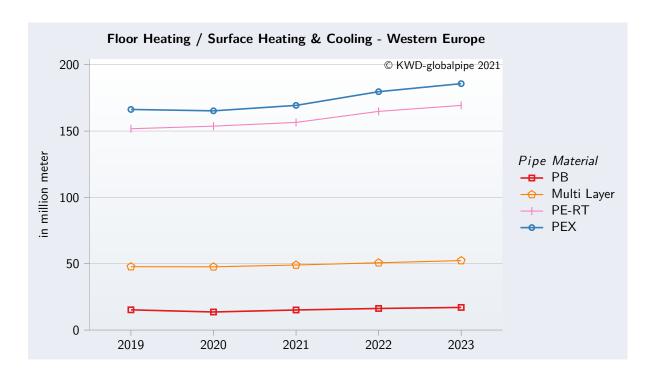
## Sanitary / Hot & Cold Water Systems - Western Europe

STS	Year	N	/letal-Pip	es		Plastic	-Pipes		Multi	То	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	3.45	159.07	32.45	75.74	7.54	13.70	18.80	178.84	194.97	115.78	489.59
_ ≣	2020	3.15	150.03	32.47	73.52	7.44	13.56	16.97	176.66	185.65	111.49	473.80
_	2021	3.16	153.31	32.55	73.41	7.53	13.83	17.91	177.88	189.02	112.68	479.58
	2022	3.11	155.62	32.98	73.79	7.69	14.21	18.28	181.16	191.71	113.97	486.84
ge on Years	2023	3.03	157.02	33.08	74.77	7.80	14.52	18.41	182.65	193.13	115.50	491.28
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-8.70	-5.68	0.06	-2.93	-1.33	-1.02	-9.73	-1.22	-4.78	-3.71	-3.23
% C	2021	0.32	2.18	0.25	-0.15	1.21	1.99	5.54	0.69	1.81	1.07	1.22
٥, ٣	2022	-1.58	1.51	1.32	0.52	2.12	2.75	2.07	1.84	1.43	1.14	1.51
Φ	2023	-2.57	0.90	0.30	1.33	1.43	2.18	0.71	0.82	0.74	1.34	0.91
Share	2019	0.70	32.49	6.63	15.47	1.54	2.80	3.84	36.53	39.82	23.65	100.00
Market Sh	2020	0.66	31.67	6.85	15.52	1.57	2.86	3.58	37.29	39.18	23.53	100.00
	2021	0.66	31.97	6.79	15.31	1.57	2.88	3.73	37.09	39.41	23.50	100.00
	2022	0.64	31.97	6.77	15.16	1.58	2.92	3.75	37.21	39.38	23.41	100.00
%	2023	0.62	31.96	6.73	15.22	1.59	2.96	3.75	37.18	39.31	23.51	100.00

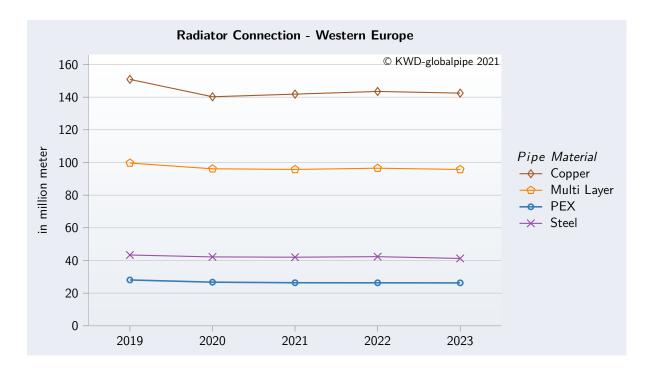
#### Heating & Plumbing Pipes - Western Europe

S	Year	N	/letal-Pip	es		Plastic	-Pipes		Multi	То	tals	Total
Pipes in Million Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes lion M	2019	46.79	316.78	32.45	270.09	163.15	14.33	40.70	326.25	396.02	488.27	1,210.54
_ ≣	2020	45.33	297.09	32.47	265.48	164.79	14.17	36.41	320.46	374.89	480.85	1,176.20
_	2021	45.16	302.04	32.55	269.12	167.69	14.44	39.18	322.65	379.75	490.43	1,192.83
	2022	45.44	306.35	32.98	279.78	176.15	14.83	40.83	328.37	384.77	511.59	1,224.73
ge on Years	2023	44.27	306.95	33.08	286.78	180.72	15.14	41.75	330.74	384.30	524.39	1,239.43
Change c	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	-3.12	-6.22	0.06	-1.71	1.01	-1.12	-10.54	-1.77	-5.34	-1.52	-2.84
% C	2021	-0.38	1.66	0.25	1.37	1.76	1.91	7.61	0.68	1.30	1.99	1.41
∘∕ ₾	2022	0.62	1.43	1.32	3.96	5.05	2.70	4.21	1.77	1.32	4.31	2.67
Φ	2023	-2.57	0.20	0.30	2.50	2.59	2.09	2.25	0.72	-0.12	2.50	1.20
Share	2019	3.87	26.17	2.68	22.31	13.48	1.18	3.36	26.95	32.71	40.33	100.00
	2020	3.85	25.26	2.76	22.57	14.01	1.20	3.10	27.25	31.87	40.88	100.00
Market	2021	3.79	25.32	2.73	22.56	14.06	1.21	3.28	27.05	31.84	41.12	100.00
	2022	3.71	25.01	2.69	22.84	14.38	1.21	3.33	26.81	31.42	41.77	100.00
%	2023	3.57	24.77	2.67	23.14	14.58	1.22	3.37	26.68	31.01	42.31	100.00

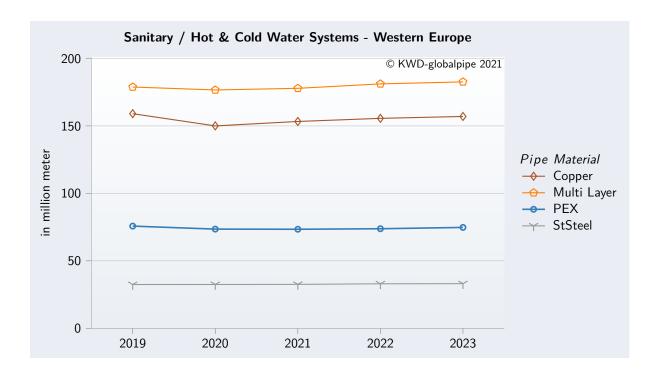
#### Floor Heating / Surface Heating & Cooling - Western Europe



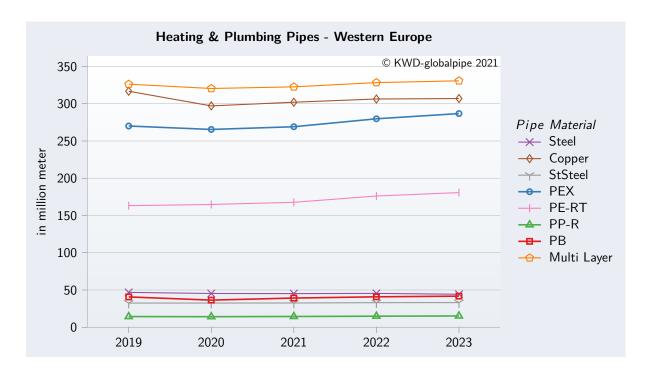
#### Radiator Connection - Western Europe



#### Sanitary / Hot & Cold Water Systems - Western Europe



Heating & Plumbing Pipes - Western Europe



## 4.2 Consumption of Heating & Plumbing Pipes - Eastern Europe

## Floor Heating / Surface Heating & Cooling - Eastern Europe

Countries: CZE, HUN, POL, SVK

S	Year	М	etal-Pipe	s		Plastic	-Pipes		Multi	To	otals	Total
es in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	0.02	0.98	0.00	5.58	10.37	0.20	0.03	3.25	1.00	16.18	20.43
_ ≣	2020	0.02	1.14	0.00	6.44	12.22	0.24	0.03	3.57	1.16	18.93	23.66
_	2021	0.01	1.20	0.00	6.81	12.94	0.25	0.03	3.71	1.21	20.03	24.95
	2022	0.01	1.22	0.00	6.87	13.25	0.23	0.04	3.74	1.23	20.39	25.36
ge on Years	2023	0.00	1.29	0.00	7.49	14.20	0.28	0.04	3.96	1.29	22.01	27.26
% Change on Previous Yes	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	0.00	16.33	_	15.41	17.84	20.00	0.00	9.85	16.00	17.00	15.81
	2021	-50.00	5.26	-	5.75	5.89	4.17	0.00	3.92	4.31	5.81	5.45
o,	2022	0.00	1.67	-	0.88	2.40	-8.00	33.33	0.81	1.65	1.80	1.64
Φ	2023	-100.00	5.74	-	9.02	7.17	21.74	0.00	5.88	4.88	7.95	7.49
Share	2019	0.10	4.80	0.00	27.31	50.76	0.98	0.15	15.91	4.89	79.20	100.00
Market Sh	2020	0.08	4.82	0.00	27.22	51.65	1.01	0.13	15.09	4.90	80.01	100.00
	2021	0.04	4.81	0.00	27.29	51.86	1.00	0.12	14.87	4.85	80.28	100.00
	2022	0.04	4.81	0.00	27.09	52.25	0.91	0.16	14.75	4.85	80.40	100.00
%	2023	0.00	4.73	0.00	27.48	52.09	1.03	0.15	14.53	4.73	80.74	100.00

#### Radiator Connection - Eastern Europe

S	Year	N	∕letal-Pip	es		Plastic	-Pipes		Multi	То	tals	Total
ss in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	10.72	18.37	0.00	2.85	1.12	2.15	0.47	15.03	29.09	6.59	50.71
≣	2020	11.17	18.78	0.00	2.91	1.18	2.24	0.46	15.62	29.95	6.79	52.36
_	2021	11.07	18.63	0.00	2.88	1.17	2.22	0.46	15.49	29.70	6.73	51.92
	2022	11.04	18.70	0.00	2.88	1.16	2.22	0.47	15.44	29.74	6.73	51.91
ge on Years	2023	10.96	18.71	0.00	2.90	1.19	2.19	0.46	15.57	29.67	6.74	51.98
% Change or Previous Year	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	4.20	2.23	_	2.11	5.36	4.19	-2.13	3.93	2.96	3.03	3.25
% C	2021	-0.90	-0.80	-	-1.03	-0.85	-0.89	0.00	-0.83	-0.83	-0.88	-0.84
o, T	2022	-0.27	0.38	_	0.00	-0.85	0.00	2.17	-0.32	0.13	0.00	-0.02
υ	2023	-0.72	0.05	-	0.69	2.59	-1.35	-2.13	0.84	-0.24	0.15	0.13
Share	2019	21.14	36.23	0.00	5.62	2.21	4.24	0.93	29.64	57.37	13.00	100.00
	2020	21.33	35.87	0.00	5.56	2.25	4.28	0.88	29.83	57.20	12.97	100.00
Market	2021	21.32	35.88	0.00	5.55	2.25	4.28	0.89	29.83	57.20	12.96	100.00
	2022	21.27	36.02	0.00	5.55	2.23	4.28	0.91	29.74	57.29	12.96	100.00
%	2023	21.09	35.99	0.00	5.58	2.29	4.21	0.88	29.95	57.08	12.97	100.00

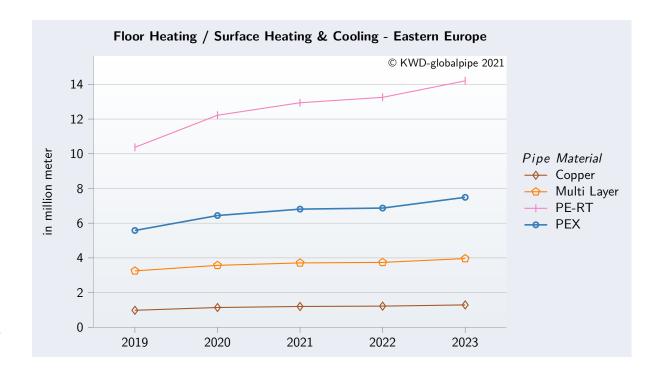
## Sanitary / Hot & Cold Water Systems - Eastern Europe

S	Year	N	∕letal-Pip	es		Plastic-	Pipes		Multi	То	tals	Total
es in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	3.81	12.90	0.13	5.78	1.95	13.02	0.49	13.40	16.84	21.24	51.48
_ ≣	2020	3.83	13.66	0.14	6.09	2.00	13.66	0.52	14.40	17.63	22.27	54.30
_	2021	3.70	13.75	0.15	6.11	2.02	13.78	0.52	14.45	17.60	22.43	54.48
	2022	3.54	13.71	0.16	6.09	2.05	13.83	0.52	14.32	17.41	22.49	54.22
ge on Years	2023	3.50	14.04	0.18	6.25	2.10	14.12	0.53	14.93	17.72	23.00	55.65
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	0.52	5.89	7.69	5.36	2.56	4.92	6.12	7.46	4.69	4.85	5.48
% C	2021	-3.39	0.66	7.14	0.33	1.00	0.88	0.00	0.35	-0.17	0.72	0.33
o, T	2022	-4.32	-0.29	6.67	-0.33	1.49	0.36	0.00	-0.90	-1.08	0.27	-0.48
Φ	2023	-1.13	2.41	12.50	2.63	2.44	2.10	1.92	4.26	1.78	2.27	2.64
Share	2019	7.40	25.06	0.25	11.23	3.79	25.29	0.95	26.03	32.71	41.26	100.00
	2020	7.05	25.16	0.26	11.22	3.68	25.16	0.96	26.52	32.47	41.01	100.00
Market	2021	6.79	25.24	0.28	11.22	3.71	25.29	0.95	26.52	32.31	41.17	100.00
	2022	6.53	25.29	0.30	11.23	3.78	25.51	0.96	26.41	32.11	41.48	100.00
%	2023	6.29	25.23	0.32	11.23	3.77	25.37	0.95	26.83	31.84	41.33	100.00

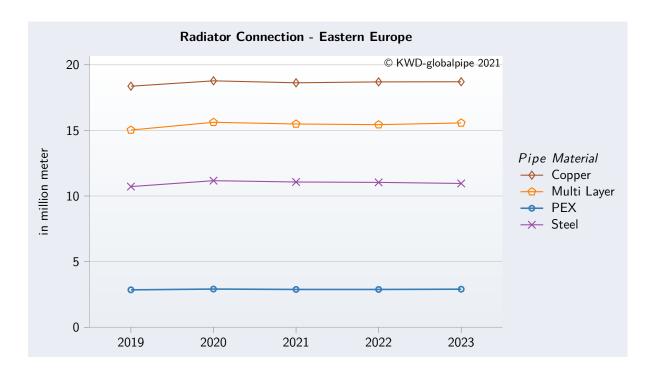
#### Heating & Plumbing Pipes - Eastern Europe

STS	Year	N	∕letal-Pip	es		Plastic-	Pipes		Multi	То	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	14.55	32.25	0.13	14.21	13.44	15.37	0.99	31.68	46.93	44.01	122.62
<u>_</u>	2020	15.02	33.58	0.14	15.44	15.40	16.14	1.01	33.59	48.74	47.99	130.32
_	2021	14.78	33.58	0.15	15.80	16.13	16.25	1.01	33.65	48.51	49.19	131.35
	2022	14.59	33.63	0.16	15.84	16.46	16.28	1.03	33.50	48.38	49.61	131.49
ge on Years	2023	14.46	34.04	0.18	16.64	17.49	16.59	1.03	34.46	48.68	51.75	134.89
% Change o	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	3.23	4.12	7.69	8.66	14.58	5.01	2.02	6.03	3.86	9.04	6.28
% C	2021	-1.60	0.00	7.14	2.33	4.74	0.68	0.00	0.18	-0.47	2.50	0.79
o, T	2022	-1.29	0.15	6.67	0.25	2.05	0.18	1.98	-0.45	-0.27	0.85	0.11
Φ	2023	-0.89	1.22	12.50	5.05	6.26	1.90	0.00	2.87	0.62	4.31	2.59
Share	2019	11.87	26.30	0.11	11.59	10.96	12.53	0.81	25.84	38.27	35.89	100.00
Market Sh	2020	11.53	25.77	0.11	11.85	11.82	12.38	0.78	25.78	37.40	36.82	100.00
	2021	11.25	25.57	0.11	12.03	12.28	12.37	0.77	25.62	36.93	37.45	100.00
	2022	11.10	25.58	0.12	12.05	12.52	12.38	0.78	25.48	36.79	37.73	100.00
%	2023	10.72	25.24	0.13	12.34	12.97	12.30	0.76	25.55	36.09	38.36	100.00

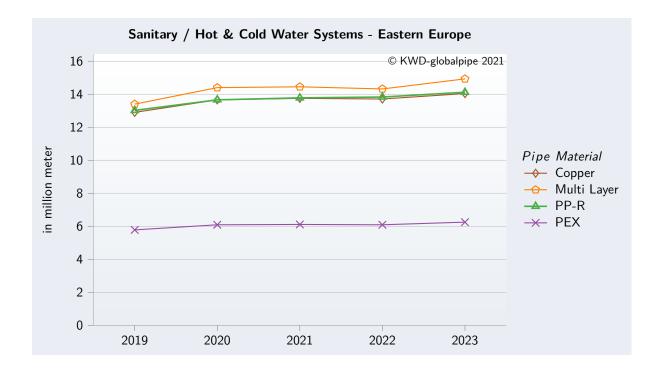
#### Floor Heating / Surface Heating & Cooling - Eastern Europe



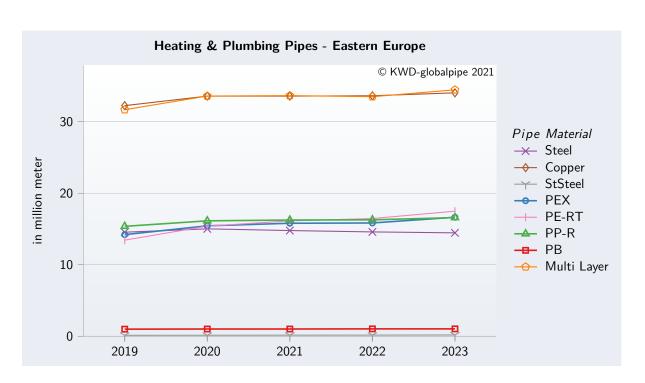
#### Radiator Connection - Eastern Europe



#### Sanitary / Hot & Cold Water Systems - Eastern Europe



Heating & Plumbing Pipes - Eastern Europe



## 4.3 Consumption of Heating & Plumbing Pipes - Europe (Total)

## Floor Heating / Surface Heating & Cooling - Europe

S	Year	М	etal-Pipe	s		Plastic	-Pipes		Multi	To	otals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes Million M	2019	0.02	7.82	0.00	171.87	162.12	0.41	15.28	51.01	7.84	349.68	408.53
≣	2020	0.02	7.97	0.00	171.69	165.93	0.44	13.65	51.24	7.99	351.71	410.94
_	2021	0.01	8.08	0.00	176.16	169.47	0.45	15.17	52.74	8.09	361.25	422.08
	2022	0.01	8.46	0.00	186.55	178.08	0.43	16.32	54.46	8.47	381.38	444.31
ge on Years	2023	0.00	8.76	0.00	193.23	183.55	0.48	17.10	56.33	8.76	394.36	459.45
Change vious Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	0.00	1.92	_	-0.10	2.35	7.32	-10.67	0.45	1.91	0.58	0.59
% C	2021	-50.00	1.38	-	2.60	2.13	2.27	11.14	2.93	1.25	2.71	2.71
ە` <u>۵</u>	2022	0.00	4.70	_	5.90	5.08	-4.44	7.58	3.26	4.70	5.57	5.27
Φ	2023	-100.00	3.55	-	3.58	3.07	11.63	4.78	3.43	3.42	3.40	3.41
Share	2019	0.00	1.91	0.00	42.07	39.68	0.10	3.74	12.49	1.92	85.59	100.00
<del>5</del>	2020	0.00	1.94	0.00	41.78	40.38	0.11	3.32	12.47	1.94	85.59	100.00
Market	2021	0.00	1.91	0.00	41.74	40.15	0.11	3.59	12.50	1.92	85.59	100.00
	2022	0.00	1.90	0.00	41.99	40.08	0.10	3.67	12.26	1.91	85.84	100.00
%	2023	0.00	1.91	0.00	42.06	39.95	0.10	3.72	12.26	1.91	85.83	100.00

## Radiator Connection - Europe

SIS	Year	N	/letal-Pip	es		Plastic	-Pipes		Multi	То	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	PB	layer	Metal	Plastics	
Pipes Million M	2019	54.06	169.24	0.00	30.91	4.98	2.57	7.12	114.68	223.30	45.58	383.56
<u></u>	2020	53.35	159.01	0.00	29.62	4.82	2.65	6.28	111.75	212.36	43.37	367.48
_	2021	53.07	160.48	0.00	29.24	4.80	2.63	6.59	111.23	213.55	43.26	368.04
	2022	53.37	162.19	0.00	29.19	4.79	2.64	6.74	111.93	215.56	43.36	370.85
ge on Years	2023	52.20	161.17	0.00	29.17	4.76	2.61	6.74	111.29	213.37	43.28	367.94
% Change o	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-1.31	-6.04	_	-4.17	-3.21	3.11	-11.80	-2.55	-4.90	-4.85	-4.19
% C	2021	-0.52	0.92	-	-1.28	-0.41	-0.75	4.94	-0.47	0.56	-0.25	0.15
۰, <del>۳</del>	2022	0.57	1.07	-	-0.17	-0.21	0.38	2.28	0.63	0.94	0.23	0.76
Φ	2023	-2.19	-0.63	-	-0.07	-0.63	-1.14	0.00	-0.57	-1.02	-0.18	-0.78
Share	2019	14.09	44.12	0.00	8.06	1.30	0.67	1.86	29.90	58.22	11.88	100.00
	2020	14.52	43.27	0.00	8.06	1.31	0.72	1.71	30.41	57.79	11.80	100.00
ž.	2021	14.42	43.60	0.00	7.94	1.30	0.71	1.79	30.22	58.02	11.75	100.00
Market	2022	14.39	43.73	0.00	7.87	1.29	0.71	1.82	30.18	58.13	11.69	100.00
%	2023	14.19	43.80	0.00	7.93	1.29	0.71	1.83	30.25	57.99	11.76	100.00

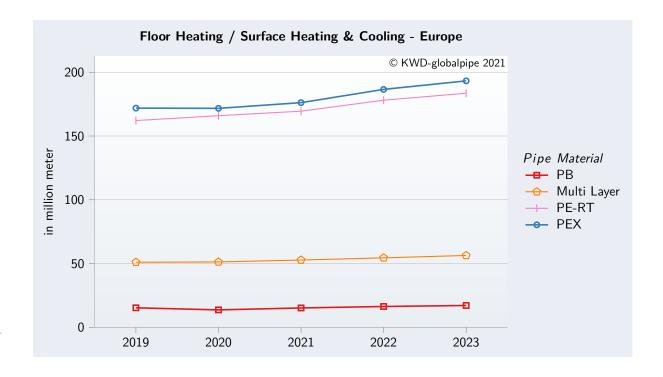
## Sanitary / Hot & Cold Water Systems - Europe

STS	Year	N	/letal-Pip	es		Plastic-	Pipes		Multi	То	tals	Total
s in Meters		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
	2019	7.26	171.97	32.58	81.52	9.49	26.72	19.29	192.24	211.81	137.02	541.07
Pip. Million	2020	6.98	163.69	32.61	79.61	9.44	27.22	17.49	191.06	203.28	133.76	528.10
_	2021	6.86	167.06	32.70	79.52	9.55	27.61	18.43	192.33	206.62	135.11	534.06
	2022	6.65	169.33	33.14	79.88	9.74	28.04	18.80	195.48	209.12	136.46	541.06
ge on Years	2023	6.53	171.06	33.26	81.02	9.90	28.64	18.94	197.58	210.85	138.50	546.93
nge s Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Change Previous Ye	2020	-3.86	-4.81	0.09	-2.34	-0.53	1.87	-9.33	-0.61	-4.03	-2.38	-2.40
% C	2021	-1.72	2.06	0.28	-0.11	1.17	1.43	5.37	0.66	1.64	1.01	1.13
o,	2022	-3.06	1.36	1.35	0.45	1.99	1.56	2.01	1.64	1.21	1.00	1.31
υ	2023	-1.80	1.02	0.36	1.43	1.64	2.14	0.74	1.07	0.83	1.49	1.08
Share	2019	1.34	31.78	6.02	15.07	1.75	4.94	3.57	35.53	39.15	25.32	100.00
	2020	1.32	31.00	6.17	15.07	1.79	5.15	3.31	36.18	38.49	25.33	100.00
Market	2021	1.28	31.28	6.12	14.89	1.79	5.17	3.45	36.01	38.69	25.30	100.00
	2022	1.23	31.30	6.13	14.76	1.80	5.18	3.47	36.13	38.65	25.22	100.00
%	2023	1.19	31.28	6.08	14.81	1.81	5.24	3.46	36.13	38.55	25.32	100.00

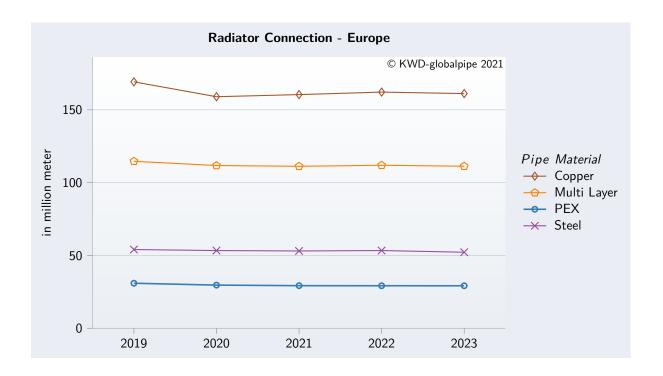
## Heating & Plumbing Pipes - Europe

SIS.	Year	N	/letal-Pip	es		Plastic	-Pipes		Multi	То	tals	Total
s in Meter		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
(I)	2019	61.34	349.03	32.58	284.30	176.59	29.70	41.69	357.93	442.95	532.28	1,333.16
Pip. Million	2020	60.35	330.67	32.61	280.92	180.19	30.31	37.42	354.05	423.63	528.84	1,306.52
_	2021	59.94	335.62	32.70	284.92	183.82	30.69	40.19	356.30	428.26	539.62	1,324.18
	2022	60.03	339.98	33.14	295.62	192.61	31.11	41.86	361.87	433.15	561.20	1,356.22
on ears	2023	58.73	340.99	33.26	303.42	198.21	31.73	42.78	365.20	432.98	576.14	1,374.32
<u>س</u> کے	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	-1.61	-5.26	0.09	-1.19	2.04	2.05	-10.24	-1.08	-4.36	-0.65	-2.00
% C	2021	-0.68	1.50	0.28	1.42	2.01	1.25	7.40	0.64	1.09	2.04	1.35
o,	2022	0.15	1.30	1.35	3.76	4.78	1.37	4.16	1.56	1.14	4.00	2.42
ω	2023	-2.17	0.30	0.36	2.64	2.91	1.99	2.20	0.92	-0.04	2.66	1.33
Share	2019	4.60	26.18	2.44	21.33	13.25	2.23	3.13	26.85	33.23	39.93	100.00
	2020	4.62	25.31	2.50	21.50	13.79	2.32	2.86	27.10	32.42	40.48	100.00
Market	2021	4.53	25.35	2.47	21.52	13.88	2.32	3.04	26.91	32.34	40.75	100.00
	2022	4.43	25.07	2.44	21.80	14.20	2.29	3.09	26.68	31.94	41.38	100.00
%	2023	4.27	24.81	2.42	22.08	14.42	2.31	3.11	26.57	31.51	41.92	100.00

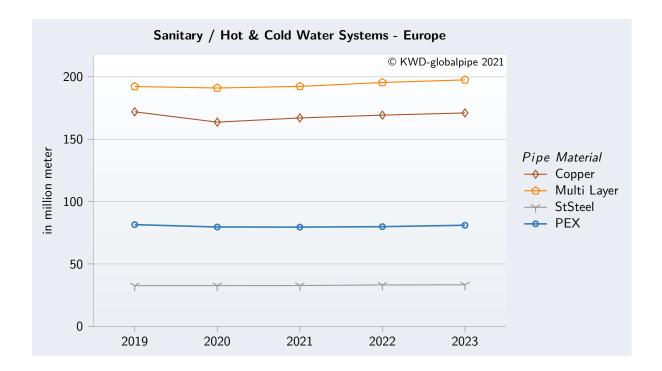
#### Floor Heating / Surface Heating & Cooling - Europe



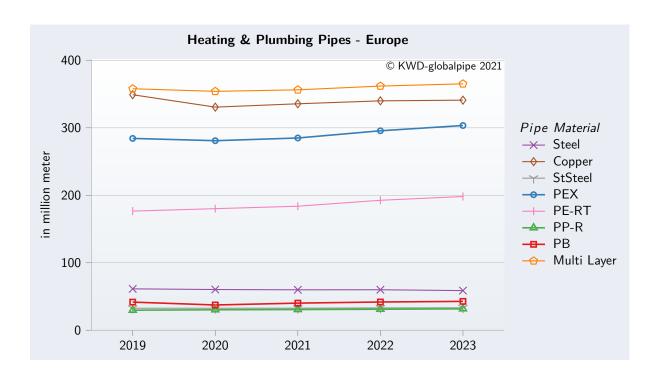
#### Radiator Connection - Europe



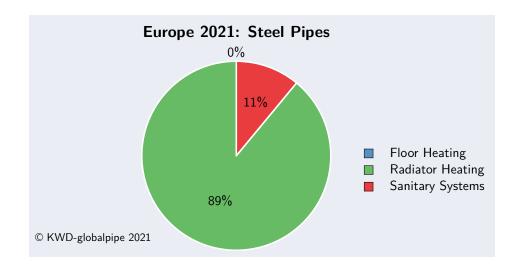
# Sanitary / Hot & Cold Water Systems - Europe

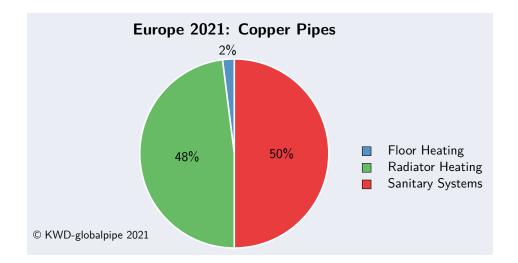


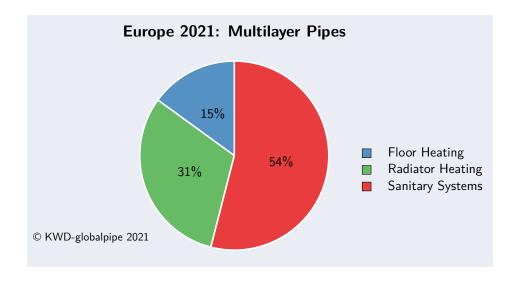
Heating & Plumbing Pipes - Europe

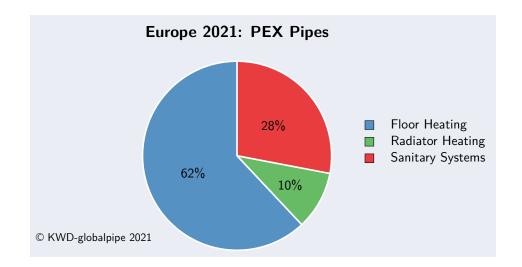


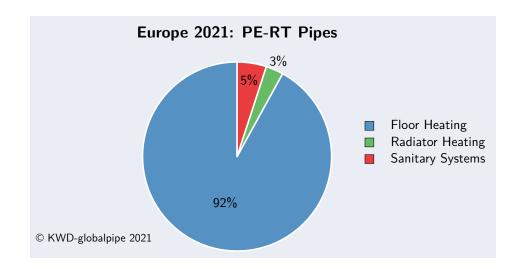
# 4.4 European Pipe Consumption broken down by applications 2021

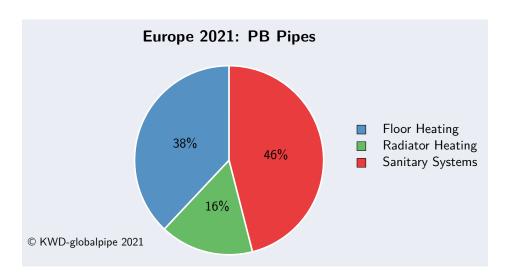




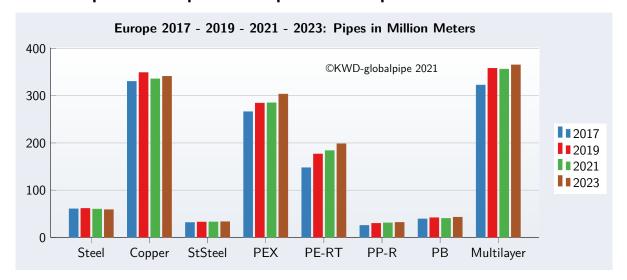


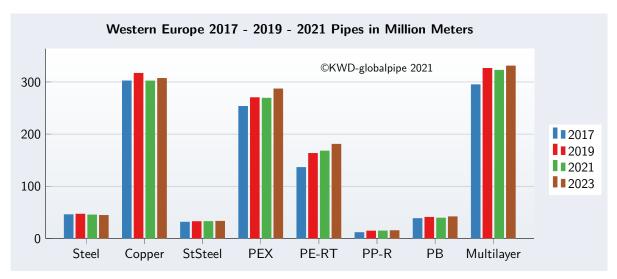


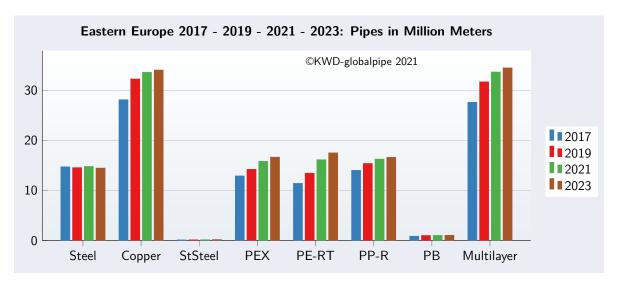


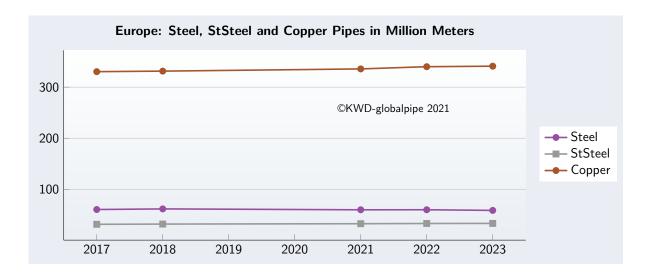


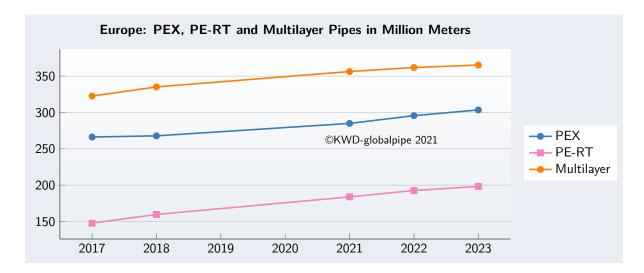
# 4.5 Development of Pipe Consumption in Europe 2017 - 2019 - 2021 - 2023

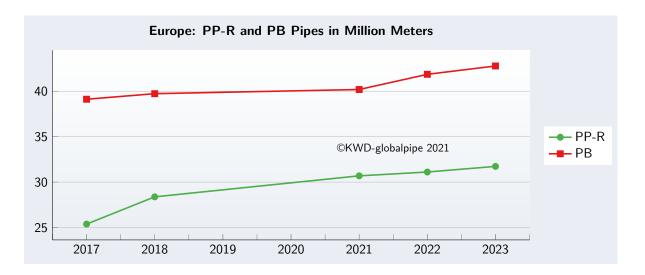












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# 4.6 Overview: Heating & Plumbing Pipes per Country 2021

# Countries in Comparison to Europe / in Million Metres

	Metal-Pipes			Plastic-Pipes			Multi layer	Multi layer Totals			
2019	Steel	Copper	StSteel	PEX	PE-RT	PP-R	PB	Pipes	Metall	Plastics	Total
AUT	0,73	7,25	0,37	8,38	10,83	2,12	0,88	12,81	8,35	22,21	43,37
BEL	0,90	4,25	0,44	7,33	6,02	0,00	0,00	17,08	5,59	13,35	36,02
CZE	1,46	6,06	0,01	2,77	2,75	2,75	0,37	3,90	7,53	8,64	20,07
DNK	1,95	1,40	0,66	10,23	3,55	0,00	0,07	8,43	4,01	13,85	26,29
FIN	2,33	2,91	0,21	9,49	1,17	0,00	0,04	6,04	5,45	10,70	22,19
Frau	2,12	67,14	0,88	70,96	3,65	0,00	2,22	17,35	70,14	76,83	164,32
DEU	16,07	65,83	25,49	75,98	99,42	0,00	7,19	115,65	107,39	182,59	405,63
GBR	3,50	86,26	0,57	13,43	0,33	0,00	23,90	9,58	90,33	37,66	137,57
HUN	0,92	2,18	0,00	2,17	1,08	0,95	0,00	5,80	3,10	4,20	13,10
IRL	0,28	5,08	0,00	3,92	1,41	0,13	0,72	4,07	5,36	6,18	15,61
ITA	4,93	28,37	0,74	11,40	4,86	6,02	1,00	36,79	34,04	23,28	94,11
NLD	2,59	10,14	0,17	6,41	23,13	0,00	1,09	30,89	12,90	30,63	74,42
NOR	2,29	4,56	0,52	8,26	1,72	0,00	0,00	3,22	7,37	9,98	20,57
POL	11,43	24,08	0,14	9,67	11,26	11,28	0,57	21,28	35,65	32,78	89,71
PRT	1,35	3,19	0,18	2,85	0,54	1,21	0,09	2,85	4,72	4,69	12,26
SVK	0,97	1,26	0,00	1,19	1,04	1,27	0,07	2,67	2,23	3,57	8,47
ESP	2,57	8,39	0,49	13,79	8,50	4,96	0,76	27,72	11,45	28,01	67,18
SWE	2,45	6,61	0,64	21,13	2,45	0,00	0,05	6,03	9,70	23,63	39,36
CHE	1,10	0,66	1,19	5,56	0,11	0,00	1,17	24,14	2,95	6,84	33,93
Western Europe	45,16	302,04	32,55	269,12	167,69	14,44	39,18	322,65	379,75	490,43	1192,83
Eastern Europe	14,78	33,58	0,15	15,80	16,13	16,25	1,01	33,65	48,51	49,19	131,35
Europe	59,94	335,62	32,70	284,92	183,82	30,69	40,19	356,30	428,26	539,62	1324,18

# Countries in Comparison to Europe $\ /\$ in percentage of Europe

	Metal-Pipes			Plastic-Pipes				Multi layer	Totals		
2019	Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	Pipes	Metall	Plastics	Total
AUT	1,22%	2,16%	1,13%	2,94%	5,89%	6,91%	2,19%	3,60%	1,95%	4,12%	3,28%
BEL	1,50%	1,27%	1,35%	2,57%	3,27%	0,00%	0,00%	4,79%	1,31%	2,47%	2,72%
CZE	2,44%	1,81%	0,03%	0,97%	1,50%	8,96%	0,92%	1,09%	1,76%	1,60%	1,52%
DNK	3,25%	0,42%	2,02%	3,59%	1,93%	0,00%	0,17%	2,37%	0,94%	2,57%	1,99%
FIN	3,89%	0,87%	0,64%	3,33%	0,64%	0,00%	0,10%	1,70%	1,27%	1,98%	1,68%
Frau	3,54%	20,01%	2,69%	24,91%	1,99%	0,00%	5,52%	4,87%	16,38%	14,24%	12,41%
DEU	26,81%	19,61%	77,95%	26,67%	54,09%	0,00%	17,89%	32,46%	25,08%	33,84%	30,63%
GBR	5,84%	25,70%	1,74%	4,71%	0,18%	0,00%	59,47%	2,69%	21,09%	6,98%	10,39%
HUN	1,53%	0,65%	0,00%	0,76%	0,59%	3,10%	0,00%	1,63%	0,72%	0,78%	0,99%
IRL	0,47%	1,51%	0,00%	1,38%	0,77%	0,42%	1,79%	1,14%	1,25%	1,15%	1,18%
ITA	8,22%	8,45%	2,26%	4,00%	2,64%	19,62%	2,49%	10,33%	7,95%	4,31%	7,11%
NLD	4,32%	3,02%	0,52%	2,25%	12,58%	0,00%	2,71%	8,67%	3,01%	5,68%	5,62%
NOR	3,82%	1,36%	1,59%	2,90%	0,94%	0,00%	0,00%	0,90%	1,72%	1,85%	1,55%
POL	19,07%	7,17%	0,43%	3,39%	6,13%	36,75%	1,42%	5,97%	8,32%	6,07%	6,77%
PRT	2,25%	0,95%	0,55%	1,00%	0,29%	3,94%	0,22%	0,80%	1,10%	0,87%	0,93%
SVK	1,62%	0,38%	0,00%	0,42%	0,57%	4,14%	0,17%	0,75%	0,52%	0,66%	0,64%
ESP	4,29%	2,50%	1,50%	4,84%	4,62%	16,16%	1,89%	7,78%	2,67%	5,19%	5,07%
SWE	4,09%	1,97%	1,96%	7,42%	1,33%	0,00%	0,12%	1,69%	2,27%	4,38%	2,97%
CHE	1,84%	0,20%	3,64%	1,95%	0,06%	0,00%	2,91%	6,78%	0,69%	1,27%	2,56%
Western Europe	75,34%	89,99%	99,54%	94,45%	91,23%	47,05%	97,49%	90,56%	88,67%	90,88%	90,08%
Eastern Europe	24,66%	10,01%	0,46%	5,55%	8,77%	52,95%	2,51%	9,44%	11,33%	9,12%	9,92%
Europe	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

# 5 KWD-globalpipe - News on plastic pipes and fittings in 2020/2021

Below you will find the headlines of the KWD-globalpipe issues from the years 2020/2021.

Our Service: If you are interested in an article, please send the issue number with the keyword "send issue" to hix@kwd-online.de and we will immediately send you the corresponding issue.

KWD-globalpipe is an information service about pipes and fittings in building services, agriculture and infrastructure.

We report about pipes and fittings for:

- Heating and cooling systems
- Radiator connections
- Hot water installations / plumbing systems
- Gas Installations
- Sprinkler Systems
- Drainage and sewerage
- District / local heating systems

#### Content of the newsletters are:

- Pipes and pipe systems, fittings, accessories, and other hardware
- Related raw materials
- Company and personal news
- Standards and approvals
- Statistical data, forecasts and trends
- Trade Shows and conventions

#### globalpipe No.818 26.10.2021

- 816 26.10.2021 Global PVC pipes market is projected to witness healthy growth during 2021–2028
- 816 26.10.2021 Ceresana examines the world market for PVC newly published report
- 816 26.10.2021 HVAC 2030: BSRIA study&event exploring the future of residential heating markets
- 816 26.10.2021 BSRIA: Updated Pre-Commissioning Cleaning of Pipework Systems training course
- 816 26.10.2021 The Big 5 live in person was huge success / Online Reconnect Days 16 -17 Nov 2021
- 816 26.10.2021 EUROCONSTRUCT Conference program of 92nd edition in Nov 2021 is completed
- 816 26.10.2021 Plastic Pipe Conference & Exhibition (PPXX) a success PPXXI in Lake Buena Vista
- 816 26.10.2021 NUPI + Borealis made interesting presentation about PP-R&PP-RCT pipes at PPXX
- 816 26.10.2021 Briefing on European construction: Real problems of Czech construction industry
- 816 26.10.2021 Briefing on European construction: Material shortages threaten sector's recovery
- 816 26.10.2021 Briefing on European construction: Denmark's construction boom slows down
- 816 26.10.2021 Economic headwinds and energy crisis trim China's construction industry growth
- 816 26.10.2021 Young professionals in construction survey 2021

#### globalpipe No.817 18.10.2021

- 817 18.10.2021 THE Machines Yvonand SA celebrates its 35th anniversary this month
- 817 18.10.2021 National Pipe & Plastics, Inc. acquired by Oldcastle Infrastructure, Inc.
- 817 18.10.2021 SIKORA opens new subsidiary in Poland with headquarters in Lodz
- 817 18.10.2021 SAPPMA forms three new specialist standing committee with specific areas of focus

- 817 18.10.2021 New UNI EN 1264:2021 Water-filled radiant heating&cooling systems in buildings
- 817 18.10.2021 PPI: Newly updated ANSI/AWWA C906-21 HDPE pressure pipe standard
- 817 18.10.2021 ADS Advanced Drainage System: Q4 & fiscal 2021 and Q1 & fiscal 2022 results
- 817 18.10.2021 Danfoss announces best half-year results ever Sales grew 18% against H1 2020
- 817 18.10.2021 Nupi Industrie Italiane: Another success for HDPE versus cast iron
- 817 18.10.2021 Orbia: Lining up the future of safe pipeline systems
- 817 18.10.2021 Danfoss powers 100 percent electric ferry sailing World Heritage waters

#### globalpipe No.816 08.10.2021

- 816 08.10.2021 Comisa: New manifold kits with lower flow bar are now available
- 816 08.10.2021 GF Piping Systems further expands its global network of prefabrication workshops
- 816 08.10.2021 aquatherm online seminars: Focus on surface heating and cooling
- 816 08.10.2021 Uponor Campus: The new digital communication platform bundles online events
- 816 08.10.2021 KraussMaffei Group France S.A.S under new management
- 816 08.10.2021 Molecor acquires the Adequa productive unit
- 816 08.10.2021 RIFENG signed to build the 9th research & production base
- 816 08.10.2021 Roth France opens a new logistics center to mark its 45th anniversary
- 816 08.10.2021 Rettig Group: Continued strong performance and value creation during H1 2021
- 816 08.10.2021 RWC reports record results for year ended 30 June 2021
- 816 08.10.2021 Wavin: Why we are committed to train plumbers worldwide

## globalpipe No.815 28.09.2021

- 815 28.09.2021 Uponor Infra and Borealis create gravity plastic pipe with up to 70% CO2 reduction
- 815 28.09.2021 RIFENG PVC Drainage System: Performance first, price second
- 815 28.09.2021 Rubinetterie Bresciane Bonomi always closer to designers with new BIM catalogue
- 815 28.09.2021 THE Machines presents its latest Multilayer Forming&Welding Line up to 63mm OD
- 815 28.09.2021 Uponor to acquire Polish heating & sanitary components manufacturer Capricorn
- 815 28.09.2021 Arbonia with marked increase in revenue&profitability in H1 versus previous year
- 815 28.09.2021 Borealis delivers positive Q2 results despite Covid-19 + a low oil price environment
- 815 28.09.2021 Geberit Group posted exceptionally strong results in the first half of 2021
- 815 28.09.2021 Genuit (formerly Polypipe): H1 performance above 2019 upgrade to FY expectations

#### globalpipe No.814 19.08.2021

- 814 19.08.2021 RIFENG PP-R fittings: Upgraded design to improve installation efficiency
- 814 19.08.2021 Aliaxis: The new FRIALEN barcode label makes documentation & traceability easier
- 814 19.08.2021 UNICOR's UC 90 multi talent producing double wall pipe at work
- 814 19.08.2021 SIKORA: Optimized production processes with ECOCONTROL processor systems
- 814 19.08.2021 KraussMaffei High Performance becomes NETSTAL again effective October 1, 2021
- 814 19.08.2021 Uponor sells its share in the joint venture Phyn to Belkin
- 814 19.08.2021 Pegler is committed to safety, health & the environment A sustainable Pegler
- 814 19.08.2021 AMI's PVC Formulation 2021 conference will take place 16-18 November 2021
- 814 19.08.2021 SHK ESSEN 2022 opens as the first large industry presence trade fair after 3 years
- 814 19.08.2021 AMAPLAST: Positive trend for plastics & rubber processing machinery in H1 2021
- 814 19.08.2021 VDMA: German plastics and rubber machinery industry sets out on a new high
- 814 19.08.2021 aquatherm's surface heating&cooling system in first 3D-printed residential building

#### globalpipe No.813 12.08.2021

- 813 12.08.2021 SILON is making a strategic investment to increase the production capacity
- 813 12.08.2021 battenfeld-cincinnati: FRÄNKISCHE optimise existing extrusion line with new extruder
- 813 12.08.2021 LK Systems presents LK Foil Board Silent with an extended construction height
- 813 12.08.2021 Armacell: Insulation producer reports continued worsening of raw material shortage
- 813 12.08.2021 Aliaxis: IPEX makes major investment in state-of-the-art molding plant
- 813 12.08.2021 Danfoss formally completes US\$3.3bn acquisition of Eaton's hydraulics business
- 813 12.08.2021 Saint-Gobain's first-half 2021 results: New records for all performance indicators
- 813 12.08.2021 SIMONA: Revenue at record level in first half and earnings almost doubled
- 813 12.08.2021 Watts Water Technologies reports record second quarter 2021 results
- 813 12.08.2021 Plastic Pipes Insides Building: Virtual International Conference 17.-18. November2021
- 813 12.08.2021 BSRIA Conference 2021 virtual: Practical Pathways to Net Zero Buildings on 30 Sep
- 813 12.08.2021 ISH Shanghai & CIHE 2021 postponed to a later date instead of 31 Aug- 2 Sep 2021

#### globalpipe No.812 29.07.2021

- 812 29.07.2021 Eurotubi pressfitting obtained DVGW hygiene compliance certification
- 812 29.07.2021 Wienerberger acquired 100% shares in FloPlast in UK and Cork Plastics in Ireland
- 812 29.07.2021 Aalberts delivered a strong performance in the first six months of the year 2021
- 812 29.07.2021 GF: Strong performance accelerating growth
- 812 29.07.2021 Mueller Industries: Piping Systems increased by 75.1% in H1 2021 vs. H1 2020
- 812 29.07.2021 Orbia: Revenue of Wavin increased by 93% in second quarter 2021
- 812 29.07.2021 Uponor: Strong second quarter 2021 for the building solutions divisions
- 812 29.07.2021 Wienerberger reports Q2 2021 performance at record level
- 812 29.07.2021 FRÄNKISCHE launched SaWi cleaning set for profi-air classic vacuum and wipe
- 812 29.07.2021 Eurotubi: Using artificial intelligence to prevent faults in water networks

## globalpipe No.811 29.07.2021

- 811 29.07.2021 FV Plast newly introduced its FV A-PRESS all-plastic PPSU sliding sleeve fitting
- 811 29.07.2021 Asahi/America: Asahitec™ PP-RCT piping system included in MasterSpec®
- 811 29.07.2021 Asahi/America: New high purity PP-Pure® flare adapters now available
- 811 29.07.2021 RIFENG R2 Pre-filter has won lots of good reputation since its debut in Estonia recently
- 811 29.07.2021 Plastics Pipe Institute (PPI) announces projects and members of the year
- 811 29.07.2021 REHAU & Uponor USA got PPI award: PEX+PP-RCT piping for snow&ice melting project
- 811 29.07.2021 Asahi/America got PPI award: PP-RCT large diameter piping for campus water supply
- 811 29.07.2021 Pacific Corrugated Pipe Comp. got PPI award: HDPE corrugated pipes for soccer fields
- 811 29.07.2021 Dow & Performance Pipe got PPI award: PE-RT HDPE for hot saltwater disposal system
- 811 29.07.2021 Victaulic Company got PPI award: HDPE couplings for saltwater disposal facility
- 811 29.07.2021 JM Eagle & AGRU America got PPI award: HDPE pipes for redundant forced main sewer
- 811 29.07.2021 FV Plast: The Czech piping system manufacturer was acquired by ALCA Holding
- 811 29.07.2021 REHAU sells its telecommunications business unit to the Swedish company Hexatronic
- 811 29.07.2021 Construction activity in Western Europe grow by 5.7% in 2021 by GlobalData

#### globalpipe No.810 22.07.2021

- 810 22.07.2021 PPI: PEX pipe&tubing freeze-break resistance&benefits covered in new Techn. Report
- 810 22.07.2021 PPI announces major update to its free Plastic Pipe Design Calculator
- 810 22.07.2021 Roth: European Environmental Bureau recognises sustainability of Roth products
- 810 22.07.2021 Henco: The new distribution centre in Herentals is in operation since April 2021

- 810 22.07.2021 Uponor North America expanding manufacturing capacity in two facilities
- 810 22.07.2021 Aalberts acquires Premier Thermal Solutions to strengthen surface technologies in NA
- 810 22.07.2021 Rettig Group signed an agreement to divest Nordkalk to SigmaRoc
- 810 22.07.2021 Asahi/America welcomes new Operations Vice President
- 810 22.07.2021 Rettig Group: John Lindström joins Rettig Group's Management Team
- 810 22.07.2021 NIBCO: Ashley Martin named NIBCO Executive Vice President
- 810 22.07.2021 NIBCO announced the promotion of Joe Choflet to Vice President Sales
- 810 22.07.2021 Uponor North America's Bill Hooper appointed 74th Chair of CIPH
- 810 22.07.2021 Construction sector must 'clean up its act' on decarbonisation says RMI

#### globalpipe No.809 16.07.2021

- 809 16.07.2021 BRUGG offers new CALPEX clip shell BIG-T-I-L sealing ring 202mm
- 809 16.07.2021 ELYDAN: New range of next generation PE-RT pipes really shaken the market up
- 809 16.07.2021 Molecor: New TOM® Oriented PVC Pipe Network Design and Use Technical Manual
- 809 16.07.2021 Molecor at PPXX: "PVC-O DN800: Efficient transformation of soil to irrigated land"
- 809 16.07.2021 SANHA introduces new pipe dimension 168.3mm to existing stainless steel series
- 809 16.07.2021 SANHA: F-gases Piping systems for better alternatives / SANHA provides solution
- 809 16.07.2021 SIKORA: Counteract raw material prices with SIKORA measuring systems
- 809 16.07.2021 Comisa gets bigger: Development of a new production area for capacity growth
- 809 16.07.2021 Geberit appointed Tobias Knechtle as new Head of Group Executive Area Finance
- 809 16.07.2021 Danfoss: María Fernanda Souto taking the lead of new Group Strategy Function
- 809 16.07.2021 EECFA 2021 Summer Construction Forecast 3rd Pandemic edition

#### globalpipe No.808 06.07.2021

- 808 06.07.2021 INOAC: Expanding sales of aluminum refrigerant pipes and conic joints
- 808 06.07.2021 Viega's MegaPress CuNi system now with NAVSEA approval (1/2" 2")
- 808 06.07.2021 BSI issues reminder as UKCA deadline approaches Six months to go
- 808 06.07.2021 Aalberts to divest 100% of the shares of Lasco Fittings Inc. and Adex B.V.
- 808 06.07.2021 Bonomi Group acquired ball valves & brass fittings manufacturer Tecnovielle SpA
- 808 06.07.2021 RIFENG Group is going to set up a piping factory in Ethiopia
- 808 06.07.2021 Bausano Pipe Technology Virtual Show: New extrusion heads are the stars of the show | 8 Jul 2021
- 808 06.07.2021 ISH Shanghai & CIHE: The most influential HVAC exhibitions in East and Central China | 31 Aug 2 Sep 2021
- 808 06.07.2021 International Plastic Pipes XX: Major advances will be announced | 6 8 Sep 2021
- 808 06.07.2021 K 2022: The world's plastics and rubber industry focuses on K 2022 in Düsseldorf  $\mid$  19 26 Oct 2022

# globalpipe No.807 01.07.2021

- 807 01.07.2021 Italsan Perú offers NIRON CLIMA PP-R piping system for air conditioning
- 807 01.07.2021 Rotoplas Mexico added Tuboplus Ultraflex PEX-A pipe system to product catalogue
- 807 01.07.2021 Italsan Perú opens new, more centrally located office for greater customer proximity
- 807 01.07.2021 PRAWTECH has built another production hall for PP-R pipes and fittings
- 807 01.07.2021 REHAU: More independence for business units / Handover in Supervisory Board
- 807 01.07.2021 GF Piping Systems: Celebrating 50 years of Swiss quality&innovation at Seewis factory
- 807 01.07.2021 EUROTUBI: Press fittings for industrial compressed air systems
- 807 01.07.2021 EUROCONSTRUCT Conference: Strong rebound in European construction in 2021
- 807 01.07.2021 Housing stock and renewal ratio in Europe in last decade: Turkey leading the way

- 807 01.07.2021 Bulgarian residential construction: Property demand increases / by EECFA
- 807 01.07.2021 Hungarian construction industry: No improvement visible / by EECFA
- 807 01.07.2021 Serbian construction: One of the strongest growth cycles in recent history / by EECFA
- 807 01.07.2021 Ukraine's construction market amid the pandemic in 2021: a mixed bag / by EECFA

#### globalpipe No.806 24.06.2021

- 806 24.06.2021 Molecor incorporated new diameters of the ecoFITTOM® PVC-O fittings
- 806 24.06.2021 PK Kontur launched new PP-R manifolds for under floor heating systems
- 806 24.06.2021 PRO AQUA presented its new PP-R manifold Pro Aqua for water supply and heating
- 806 24.06.2021 Bausano launches new Retrofit service for safer and more performing extruders
- 806 24.06.2021 Sica: Artificial vision for pipe extrusion lines has made enormous strides
- 806 24.06.2021 BEULCO: Fitting producer relies on premium materials for drinking water installations
- 806 24.06.2021 Sica "Going Green": Contributing to a sustainable world and wellbeing
- 806 24.06.2021 Borealis: New photovoltaic rooftop array to provide power to its location in Monza
- 806 24.06.2021 NUPI Industrie Italiane awarded for reduction of environmental impact
- 806 24.06.2021 TEPPFA members ahead of plan to deliver on circular economy ambitions
- 806 24.06.2021 Europe R-PE & R-PP summer shutdowns may be called off due to market tightness

# globalpipe No.805 17.06.2021

- 805 17.06.2021 PK Kontur: PE-Xa pipe production start in 2021 / Achievements 2020+Prospects 2021
- 805 17.06.2021 PRO AQUA started PE-Xa pipe production / Share of PEX pipes in Russia rises strongly
- 805 17.06.2021 RTP Rosturplast: Russian pipe producer launched PE-Xa/EVOH pipe production
- 805 17.06.2021 Russian PE-Xa pipe manufacturers increase capacity fourfold
- 805 17.06.2021 PRO AQUA launched new its Pro Aqua axial tool "expand & connect"
- 805 17.06.2021 TECNOMATIC delivered four extrusion lines to Russian PE pipe manufacturer
- 805 17.06.2021 TECNOMATIC supplied multilayer pipe production line with increased performance
- 805 17.06.2021 PRO AQUA got DVGW and AENOR certifications for its Pro Aqua PP-R piping system
- 805 17.06.2021 RIFENG achieved NF mark by AFNOR Certification for its F18 Multi-jaw press fitting
- 805 17.06.2021 Reboca SL: Spanish PP-R and HDPE pipe manufacturer celebrates 40th anniversary
- 805 17.06.2021 Uponor revises guidance 2021, expecting increase of net sales+comp. operating profit
- 805 17.06.2021 RTP Rosturplast: ?reative ideas with the use of PP-R pipes and fittings

#### globalpipe No.804 10.06.2021

- 804 10.06.2021 Ecomatic baseboard heating: Exceptional heating quality + energetic performances
- 804 10.06.2021 HEATILE: Thin and quick-to-install prefabricated 'click-in' floor heating system
- 804 10.06.2021 Soffio's wall elements with 0.033l water content the different surface heating system
- 804 10.06.2021 herotec: Underfloor heating system tempusFLAT KLETT won Green Product Award
- 804 10.06.2021 Global Under Floor Heating Market Research Report Forecast 2027
- 804 10.06.2021 Tweetop: Multilayer pipe manufacturer started PE-RT/EVOH production on new line
- 804 10.06.2021 Tweetop Smart Push fittings form a safe, quick&easy to implement connection system
- 804 10.06.2021 aquatherm: PP-R reduces our carbon footprint on the planet New whitepaper
- 804 10.06.2021 RIFENG set up another two strategic manufacturing bases
- 804 10.06.2021 Aliaxis announces agreement to sell its SANIT business to Roca
- 804 10.06.2021 GF's Sustainability Report: accident rate+energy consumption decrease significantly
- 804 10.06.2021 Pipelife: Why more women should join the manufacturing industry

#### globalpipe No.803 02.06.2021

- 803 02.06.2021 EUROTUBI: Stainless steel press fittings, good choice for rainwater recovery systems
  803 02.06.2021 ROTH: Saving resources with rainwater usage in single- and multi-family homes
  803 02.06.2021 VIEGA's Long History with Pressing Tools: The first Press tool was built in 1989
  803 02.06.2021 VIEGA /US donates Press Tools to Texas Relief Effort to help after Killer Freeze
  803 02.06.2021 AIRCOM /ITA: Multilayer pipe for compressed air piping
  803 02.06.2021 AIRCOM /ITA: 25 years of activity in compressed air and pressure fluid systems
  803 02.06.2021 POLOPLAST's Managing Board will be completed by Alice Godderidge
  803 02.06.2021 ISH digital 2021: The post-fair phase of ISH digital finished officially Results
- 803 02.06.2021 MCE Live&Digital 2021: Organizers draw positive conclusions for 1st digital edition
- 803 02.06.2021 PPXX Conference and Exhibition will be held on 6-8 September 2021 in Amsterdam

#### globalpipe No.802 27.05.2021

27.05.2021 KWD Fitting Report 2021 shows again the most used fitting types for 10 Countries
27.05.2021 Caleffi launched new polymer manifold kit for optimal hydronic distribution
27.05.2021 IVAR MP and MPL press fittings obtain the prestigious ÜA Austrian mark
27.05.2021 Möhlenhoff: New OEM Alpha direct Balance base station / Virtual showroom 360°
27.05.2021 Armacell levies extraordinary material and operations surcharge
27.05.2021 KraussMaffei bundles all extrusion technologies under a single roof
27.05.2021 Rifeng: 25th anniversary grandly hold celebration at the Louvre Museum Foshan
27.05.2021 UNICOR: The brand new UNICOR website is officially up and running
27.05.2021 Eurotubi Pressfittings for water mist sprinkler fire extinguishing systems
27.05.2021 Uponor: Prefabricated Riser Port brings speed & security to pipeline installations

#### globalpipe No.801 18.05.2021

18.05.2021 KraussMaffei: socialProduction – Proactive production monitoring anytime+anywhere 18.05.2021 KraussMaffei launches the digital service platform pioneersClub, a service platform 18.05.2021 Molecor publishes new update of the Multi-format Catalogue with new content 18.05.2021 Molecor: State-of-the-art technology to deal with the raw materials crisis 18.05.2021 Bausano and Australian APP: Over 20 years of excellence in transformation of PVC 18.05.2021 Polypipe Group becomes known as Genuit Group plc from 6th April 2021 18.05.2021 Uponor: Strong demand in building solutions in Europe+North America in Q1 2021 18.05.2021 Watts Water reported sales of \$413 million up 8%+organic sales up 4% in Q1 2021 18.05.2021 Eastern Europe's construction output set to increase 3.6% in 2021 by GlobalData 18.05.2021 Global construction industry set to grow by 5.2% in 2021 according to GlobalData 18.05.2021 Briefing on European construction: COVID-19 created DIY boom in many countrie 18.05.2021 Briefing on European construction: Polish construction in pandemic year of 2020

#### globalpipe No.800 11.05.2021

800 11.05.2021 Viega: New Viega stainless steel pipe 1.4520 Inox ensures greater cost-effectiveness
800 11.05.2021 REHAU adds a 50-63 mm macro-composite pipe system to its range of solutions
800 11.05.2021 REHAU: RAUPIANO PLUS with flow-optimised mouldings thanks to 'max flow' branches
800 11.05.2021 REHAU: RAUGUARD HV cable protection pipe system sets new standards
800 11.05.2021 GF Piping Systems: Winery cooling system quickly built with pre-insulated piping
800 11.05.2021 Uponor appoints Michael Rauterkus as President and CEO to succeed Jyri Luomakoski
800 11.05.2021 Rettig Group appoints Topi Jokiranta as CFO to succeed Thomas Ekström
800 11.05.2021 Ostendorf takes over Swiss cable protection pipes manufacturer Simplex

- $800\ \ 11.05.2021$  NIBE acquired English heating cable company Heat Trace Holdings Ltd
- 800 11.05.2021 Eurotubi: Solve various climate change problems with new HVAC system technologies
- 800 11.05.2021 Pipelife: 100% recycled&recyclable pipe ticks 2050 ESG goal + wins innovation award
- 800 11.05.2021 Uponor: GHG emission reduction targets approved by Science Based Targets initiative

#### globalpipe No.799 05.05.2021

- 799 05.05.2021 Bausano renews its pipe extrusion lines State-of-the-art heads and increased output
- 799 05.05.2021 battenfeld-cincinnati: Processors benefit from long-standing partnership with Molecor
- 799 05.05.2021 UNICOR's UC 36 achieves top OEE values at production speeds beyond 60 m/min
- 799 05.05.2021 Viega: More than just a tool the new Viega Pressgun generation "Pressgun 6 Plus"
- 799 05.05.2021 ROTHENBERGER: Pipe cleaning made easy compatible, user-friendly and secure
- 799 05.05.2021 Aalberts acquired Sentinel to strengthen hydronic flow control position
- 799 05.05.2021 Arbonia acquires Serbian manufacturer of ventilation units Termovent
- 799 05.05.2021 Polypipe expands manufacturing infrastructure expertise following Plura investment
- 799 05.05.2021 Geberit Group has got off to an exceptionally strong start in 2021 Q1 2021 results
- 799 05.05.2021 Rettig Group: Strong performance in the first three months of 2021
- 799 05.05.2021 RWC provided trading update for the three months ended 31 March 2021

#### globalpipe No.798 27.04.2021

- 798 27.04.2021 GF Piping Systems: 20 years JRG Sanipex MT proven pipe system with new highlights
- 798 27.04.2021 FRÄNKISCHE: alpex F50 PROFI New, secure pipe connection without calibration
- 798 27.04.2021 aquatherm got DNV certification for use in "essential systems" in shipbuilding
- 798 27.04.2021 REHAU starts sales of new smart water control system RE.GUARD in Russia
- 798 27.04.2021 Arbonia: HVAC Division strengthens sales position in Spain and Portugal
- 798 27.04.2021 Uponor: "Moving Forward" -Navigating the future with a strong brand
- 798 27.04.2021 Aliaxis reports solid performance in a challenging COVID-19 context
- 798 27.04.2021 Arbonia increases profit by over 70% and sets a course for the future
- 798 27.04.2021 Armacell achieved net sales of EUR 590.5 million, a decrease of 8.4% vs. 2019
- 798 27.04.2021 SIMONA 2020: Solid earnings despite significant decline in revenue

#### globalpipe No.797 20.04.2021

- 797 20.04.2021 Efield Piping System showed its multilayer piping system & more at MCE Live+Digital
- 797 20.04.2021 Faso-Plast presented its long-proven pipe system program at this year's ISH digital
- 797 20.04.2021 Interplast announces complete upgrade of the Aqua Plus PP-R piping system
- 797 20.04.2021 UNIDELTA's UNITERM PE-Xb monolayer pipes recently NF approved
- 797 20.04.2021 Solvay new corrugated tubing technology allows greater light-weighting potential
- 797 20.04.2021 GF Piping Systems launches MULTI/JOINT® in new dimensions DN625 to DN825
- 797 20.04.2021 Nupi Industrie Italiane: New ELOFIT flanged reducing tee 800x500 SDR 17 full-rate
- 797 20.04.2021 Nupi Industrie Italiane's news in NIRON Beta range: welding saddle + branch fitting
- 797 20.04.2021 Uponor MLCP and PEX pipes environmental impact compared to copper pipes
- 797 20.04.2021 TEPPFA: Polymer pipe systems high performance in every part of the water cycle
- 797 20.04.2021 Uponor: Finding a solution for recycling PEX waste is on Uponor's agenda

# globalpipe No.796 12.04.2021

- 796 12.04.2021 Conex Bänninger introduces new press fitting series <A> Press Inox with M-profile
- 796 12.04.2021 Nupi obtains EPD Environmental certification for its Multinupi and Smartflex range

- 796 12.04.2021 Rifeng: Big size Multi-jaw press fitting system obtained the QB certificate
- 796 12.04.2021 REHAU: High drinking water quality with RAUTITAN completely lead-free
- 796 12.04.2021 GF Piping Systems launches Butterfly Valve 565 beating metal in every round
- 796 12.04.2021 Eurotubi: ISH 2021 Trade Fair Was the new digital format successful?
- 796 12.04.2021 Eurotubi's video courses on press fitting system latest: "pinch-pressing defect"
- 796 12.04.2021 GF Piping "The Connection Convention" next sustainable virtual-live event follows
- 796 12.04.2021 GF Piping Systems: Sustainable process automation solutions at "Flow to the Future"
- 796 12.04.2021 Canton Fair hosts online promotion, connecting virtual business exchanges

#### globalpipe No.795 01.04.2021

- 795 01.04.2021 Enetec showed at this year's ISH its products around Smart Heating + Cooling
- 795 01.04.2021 Interplast presented at ISH its integrated underfloor heating and cooling package
- 795 01.04.2021 REHAU's original now even better: RAUTHERM SPEED Plus 2.0 Velcro Mat
- 795 01.04.2021 ROTH presented its long-proven radiant heating and cooling systems at ISH digital
- 795 01.04.2021 Uponor: Move comfort forward with Uponor's innovative heating & cooling systems
- 795 01.04.2021 REHAU launched RAUTOOL with new generation of expanding heads at ISH digital
- 795 01.04.2021 Armacell: Malte Witt appointed new Armacell Vice President EMEA
- 795 01.04.2021 Flamco emerges from restructuring as a strong umbrella brand
- 795 01.04.2021 ISH digital 2021 offered genuine solutions for the energy revolution
- 795 01.04.2021 MCE LIVE+DIGITAL The new experience in April 2021: live 8-9 and digital 10-16

## globalpipe No.794 26.03.2021

- 794 26.03.2021 Geberit launched FlowFit supply system comfortable & safe through lateral pressing
- 794 26.03.2021 KE KELIT launched flexible stainless steel multilayer piping system STEELOX
- 794 26.03.2021 Uponor launched Uponor INOX system for distribution lines and risers
- 794 26.03.2021 Uponor launched pipe innovation for local & district heating networks Ecoflex VIP
- 794 26.03.2021 KE KELIT & liVENTO introduced CLIMATEFIX BLife active ceilings for heating & cooling
- 794 26.03.2021 TiA: New tacker gun T4 with inspection slot simplifies removal of blocked clips
- 794 26.03.2021 TiA launched EUROTOP castellated mat for arranging surface heating loops
- 794 26.03.2021 TiA launched to new pipe decoiler versions: Large size industrial and with roll
- 794 26.03.2021 Agua Evolution Systems: Revolutionary water collection system for SHK installers
- 794 26.03.2021 Uponor: The new BIM Platform Everything for digital planning in one place

#### globalpipe No.793 18.03.2021

- 793 18.03.2021 aquatherm blue pipe MF-RP OT: New test report on the oxygen permeability
- 793 18.03.2021 aquatherm black system: Elimination of register fastening rails as of 1 April 2021
- 793 18.03.2021 Molecor: TOM® Mechanical Calculation Software based on UNE 53331: 2020 standard
- 793 18.03.2021 Rifeng: Big size Multi-jaw press fitting system (40-75mm) obtained QB certificate
- 793 18.03.2021 Polypipe Group plc to change its name to Genuit Group plc on 6 April 2021
- 793 18.03.2021 THE Machines Yvonand SA acquired by CAPCELLENCE
- 793 18.03.2021 WRW Pipes GmbH takes over WRW Westfälische Rohrwerke GmbH
- 793 18.03.2021 Wefatherm take full ownership of PP-R product range from Aliaxis Netherlands
- 793 18.03.2021 Polypipe: Continued recovery in challenging markets / H2 in line with prior year
- 793 18.03.2021 Rettig: Outstanding earnings+cash flow generation Purmo Group event-&successful
- 793 18.03.2021 Saint-Gobain: Record operating margin and recurring net incomein H2 2020
- 793 18.03.2021 Uponor revises its guidance for 2021: Net sales now expected to increase from 2020
- 793 18.03.2021 Wienerberger: Resilient 2020 performance and strong platform for further growth
- 793 18.03.2021 EUROCONSTRUCT: Slight recovery of the European construction industry

#### globalpipe No.792 11.03.2021

- 792 11.03.2021 ISH almost there: The first digital edition opens its virtual door on 22 March 2021
- 792 11.03.2021 Duofil Duopipe Systems Unipessoal shows its PEX, PE-RT + multilayer pipes at ISH
- 792 11.03.2021 Pipex Auray will show PE-Xa and PE-RT/AI/PE-RT OEM pipe solutions at ISH
- 792 11.03.2021 REHAU system solutions at ISH digital Discover smart & sustainable innovations
- 792 11.03.2021 Uponor innovations at ISH in local and district heating + drinking water installations
- 792 11.03.2021 Uponor North America unveils Complete Polymer Solution for commercial projects
- 792 11.03.2021 SIKORA USA: New Business Development Engineer in Hose & Tube business unit
- 792 11.03.2021 Aalberts accelerates strategy and continues investments and innovations in FY 2021
- 792 11.03.2021 Georg Fischer reported good performance in challenging times in FY 2020
- 792 11.03.2021 Orbia: Net sales up in 2020 partly due to recovery in demand for Wavin and Dura-Line

#### globalpipe No.791 05.03.2021

- 791 05.03.2021 Huliot launches Smart Lock Ratchet lock domestic pipes & fittings drainage system
- 791 05.03.2021 Huliot introduces Zenweld patented induction welding fitting technology
- 791 05.03.2021 BRUGG Pipes presents LEAKGUARD The new generation of monitoring devices
- 791 05.03.2021 SIKORA will present its innovative systems at CHINAPLAS 2021 in Shenzhen
- 791 05.03.2021 BASF's SLENTEX® applied in industrial pipe insulation for the first time
- 791 05.03.2021 ISH digital with extensive program of events Content on several channels&web radio
- 791 05.03.2021 CHINAPLAS'21 concurrent events unveiled More than a Plastics & Rubber Trade Fair
- 791 05.03.2021 91st EUROCONSTRUCT Conference will be held in a webinar on 10-11 June 2021
- 791 05.03.2021 Briefing on European construction: Belgium Advantages of new housing
- 791 05.03.2021 European plastics industry largely optimistic despite impact of Covid-19Product news

#### globalpipe No.790 24.02.2021

- 790 24.02.2021 KWD Fittings and Pipe Connections Europe 2021. Update now published!
- 790 24.02.2021 Global Polyethylene Pipe: New study from The Freedonia Group published
- 790 24.02.2021 HDPE Pipe Market Report: Trends, forecast and competitive analysis by Lucintel
- 790 24.02.2021 Polypipe acquires ADEY Innovation, specialist for heating system protection
- 790 24.02.2021 Polypipe Group acquires Nu-Heat Holdings for a total consideration of £27 million
- 790 24.02.2021 General Fittings' website with totally renewed graphics and content is online
- 790 24.02.2021 Advanced Drainage Systems delivered record third quarter, ended 31 Dec 2020
- 790 24.02.2021 RWC reports strong results for HY 2021, six months ended 31 December 2020
- 790 24.02.2021 Watts Water: 2020 finished stronger than expected as Q4 sales better than anticipated

#### globalpipe No.789 12.02.2021

- 789 12.02.2021 Hummel launches "One for all" Two new connections and the compression fittings
- 789 12.02.2021 battenfeld-cincinnati: Successful large-diameter pipe installation in Mexico
- 789 12.02.2021 TEPPFA: Romania's pipe manufacturer TeraPlast renews its TEPPFA membership
- 789 12.02.2021 TeraPlast Group builds new factory in its Industrial Park within a project
- 789 12.02.2021 Uponor: President and CEO of Uponor Corporation Jyri Luomakoski to change
- 789 12.02.2021 Uponor: Strong performance in all segments continued in Q4 2020
- 789 12.02.2021 TeraPlast: Organic growth of 46% in EBITDA and 14% in turnover in 1-9 2020
- 789 12.02.2021 ROTH Werke: One click to the virtual showroom of their trade fair stand at ISH
- 789 12.02.2021 ISH: Intelligent sanitation fittings setting new standards thanks to digitalisation
- 789 12.02.2021 ISH: More important than ever 'Bathroom Hygiene' at ISH digital 2021

## globalpipe No.788 05.02.2021

- 788 05.02.2021 aquatherm: High quality certified SKZ test mark for aquatherm blue pipe
- 788 05.02.2021 Maillefer: Multi-layer extrusion head for corrugated pipe up to 5, or even 6 layers
- 788 05.02.2021 Armacell and smartMELAMINE announced cooperation agreement
- 788 05.02.2021 SIMONA: Acquisition of Turkish market leader for PVC foam sheets completed
- 788 05.02.2021 Geberit: CFO Roland Iff set to retire at end of 2021 / Search for successor initiated
- 788 05.02.2021 Geberit announces sales growth in FY 2020 despite crisis
- 788 05.02.2021 Borealis delivers solid financial result for 2020 in a volatile market environment
- 788 05.02.2021 Mueller Industries: FY 2020 third consecutive year of double digit earnings growth
- 788 05.02.2021 aquatherm offers online seminar program Twelve dates in the first half of 2021
- 788 05.02.2021 PPXX welcomes SABIC sponsorship Golden opportunity
- 788 05.02.2021 ISH digital 2021: Keeping track of developments via future-oriented topics
- 788 05.02.2021 Construction industries call for regular rapid mass testing to get back to work

## globalpipe No.787 28.01.2021

- 787 28.01.2021 GEBERIT novelty 2021: New innovative supply system FlowFit / from 1 April
- 787 28.01.2021 Tiemme: "NF" certification for AL-COBRAPEX multilayer pressing system
- 787 28.01.2021 Plastica Alfa: New Repair Coupling extending BluLine Plus compression fitting range
- 787 28.01.2021 Pegler Proflow Pressure Independent Control Valve (PICV) newly launched
- 787 28.01.2021 Armacell launches new AF/ArmaFlex generation with improved fire behaviour
- 787 28.01.2021 POLYPLASTIC Group's plant in Khabarovsk launches CORSYS pipe production line
- 787 28.01.2021 Tiemme is BIM ready: Implementation of the product families in the BIM is complete
- 787 28.01.2021 BRUGG Pipes: Change in management New Head of International Business
- 787 28.01.2021 Polypipe Building Products appointed Steve Heeley as new Managing Director
- 787 28.01.2021 Ferro Plast: Manufacturer of PVC and PE pipes and fittings for more than 50 years

#### globalpipe No.786 19.01.2021

- 786 19.01.2021 MAINCOR: Expansion even during the Corona crisis / 10 million Euros Investment
- 786 19.01.2021 GF expands footprint in South America with the acquisition of FGS Brasil
- 786 19.01.2021 Wieland acquires Wrisco Industries Inc. for growth objectives in aluminum sector
- 786 19.01.2021 Wavin: 40 years of professional push-fit flexible push-fit plumbing system Hep2O
- 786 19.01.2021 Wavin's Tigris K5/M5: Pressure test with air reduces risk of Legionella+water damage
- 786 19.01.2021 Aquatechnik's PP-RCT WOR: Higher performance with reduced permeability to oxygen
- 786 19.01.2021 Coes: New BluePower Black® soundproof multilayer PPC+reinforcing charges pipes
- 786 19.01.2021 Construction is one of the high-growth sectors of the Turkish economy Briefing
- 786 19.01.2021 Current impact of Covid-19 on new building permits in Germany Briefing

#### globalpipe No.785 12.01.2021

- 785 12.01.2021 SANHA introduces new pipe dimension 139,7mm to existing stainless steel series
- 785 12.01.2021 SIMONA: GrowTogether New business strategy for EMEA
- 785 12.01.2021 Danfoss forms new Climate Solutions segment
- 785 12.01.2021 Bonomi Group: more & more power of a team with Quam and the assets of Loclain
- 785 12.01.2021 BRUGG Pipes strengthens its position in Scandinavia through acquisition of Skafte
- 785 12.01.2021 Mueller Industries acquired Hart & Cooley Flexible Duct business
- 785 12.01.2021 STARK Group welcomes CVC Capital Partners Fund VII as its new investor
- 785 12.01.2021 TEPPFA: Pipe manufacturers welcome adoption of new Drinking Water Directive

- 785 12.01.2021 TEPPFA: Operation Clean Sweep Leading by example
- 785 12.01.2021 Eurostat: Share of renewable energy in the EU up to 19.7% in 2019
- 785 12.01.2021 Bausano's operating lease: Maximum production capacity with minimum investment

#### globalpipe No.784 16.12.2020

- 784 16.12.2020 ALVANCE Aluminium Group: Focus of the company after the acquisition of Aleris
- 784 16.12.2020 Uponor commits to UN Global Compact's Business ambition for 1.5°C initiative
- 784 16.12.2020 Arbonia: Outlook on the 2020 FY results H2 of financial year 2020 is going very well
- 784 16.12.2020 Euroconstruct: Outlook for 2023 remains positive Country outlook in detail
- 784 16.12.2020 Eurostat released interactive publication Housing in Europe Statistics visualised
- 784 16.12.2020 EECFA 2020 Eastern European Winter Construction Forecast 2nd Pandemic edition
- 784 16.12.2020 Construction industry of various continents: Updated press releases by GlobalData
- 784 16.12.2020 Construction industry of various countries: Updated press releases by GlobalData

#### globalpipe No.783 09.12.2020

- 783 09.12.2020 Giacomini: Manifolds with flow-rate dynamic balancing confirms savings up to 25%
- 783 09.12.2020 IVAR: New patent pending stainless steel manifolds with outlets misalignment
- 783 09.12.2020 IVAR: Modular manifolds EASY RADIANT no need for additional sealing elements
- 783 09.12.2020 SANHA novelty: First piping system for the transport of hydrogen
- 783 09.12.2020 Polyplastic opts for KraussMaffei twin-screw extruders to extend production capacity
- 783 09.12.2020 Radius Systems: Getting ready for Brexit your questions answered
- 783 09.12.2020 IVAR inaugurated the construction of its new facility first stone was laid
- 783 09.12.2020 REHAU puts new high-bay warehouse into operation Course set for growth
- 783 09.12.2020 NMC: CLIMATUBE® the new brand for their NOMA® assortment
- 783 09.12.2020 EHI publishes first ever European Heating Market Report
- 783 09.12.2020 battenfeld-cincinnati: Extruder melts and degasses granulate from used plastic

#### globalpipe No.782 01.12.2020

- 782 01.12.2020 RIFENG newly introduces PE-Xa pipes for more flexibility and better installation
- 782 01.12.2020 Bausano presents the renewed line of E-GO single-screw extruders for PO pipes
- 782 01.12.2020 General Fittings: New logo indicates 40th anniversary in 2021 / New company profile
- 782 01.12.2020 Aliaxis: Akatherm B.V. was officially rebranded as Aliaxis Nederland B.V.
- 782 01.12.2020 Aliaxis opens new Research & Technology Centre in Bangalore, India
- 782 01.12.2020 GF and Swiss Shrimp AG have signed a multi-year partnership agreement
- 782 01.12.2020 Uponor and Xcel Energy announce renewable energy agreement
- 782 01.12.2020 Uponor North America appoints Brett Boyum Vice President of Marketing & Offerings
- 782 01.12.2020 KraussMaffei: Tiziano Caprara starts as new Managing Director of KraussMaffei Italia
- 782 01.12.2020 Euroconstruct: Construction activity 7.8% complete recovery not before 2023

#### globalpipe No.781 24.11.2020

- 781 24.11.2020 Schütz developed new 11 mm profiled system plate with high thermal insulation
- 781 24.11.2020 Wieland acquired Marjan Inc. and Nasco Incorp. Now operates as Wieland Marjan
- 781 24.11.2020 Wieland acquired remaining shares of E. Jordan Brookes
- 781 24.11.2020 SIMONA plans to acquire Turkish market leader in PVC foam sheets
- 781 24.11.2020 Viega LLC has named Markus Brettschneider as its new CEO and President
- 781 24.11.2020 Advanced Drainage Systems announces for Q2 ended Sep 30 increase in net sales

- 781 24.11.2020 Borealis delivers solid Q3 results in challenging yet improving market environment
- 781 24.11.2020 Mueller Industries announced net sales increase in Q3 compared with Q3 last year
- 781 24.11.2020 Orbia: Net revenues Q3 increased 16% driven by strong recovery in Wavin + Vestolit
- 781 24.11.2020 Saint-Gobain: Strong recovery in trading in Q3 2020 Targets revised upwards
- 781 24.11.2020 SIMONA: Good EBIT performance in third quarter 2020
- 781 24.11.2020 Hillinger+Partner: Market Study Piping Systems / Components World Market

#### globalpipe No.780 17.11.2020

- 780 17.11.2020 Uponor: MLCP pipe from Uponor reliable and safe for more than 30 years
- 780 17.11.2020 BRUGG Pipes officially inaugurated the new winding centre at its Swiss location
- 780 17.11.2020 SIKORA ranks among the "TOP 100" of the German medium-sized companies
- 780 17.11.2020 Purmo Group: Majority share of a Bosch Thermotechnology radiator factory in Russia
- 780 17.11.2020 Wienerberger's portfolio becomes smarter with the acquisition of Inter Act
- 780 17.11.2020 Aalberts: In the third quarter its business further recovered
- 780 17.11.2020 Rettig Group's EBITDA increased significantly year-on-year during 1-9/2020
- 780 17.11.2020 Wienerberger reports strong performance in the first 9 months 2020
- 780 17.11.2020 Canton Fair: The 128th virtual Canton Fair successfully closed on October 24
- 780 17.11.2020 ISH digital 2021 focusing on matchmaking and lead generation
- 780 17.11.2020 Mostra Convegno launches MCE LIVE+DIGITAL 2021 The on-life experience
- 780 17.11.2020 'K 2022' Trade Fair for Plastics and Rubber: Course charted for 'K 2022'

# globalpipe No.779 06.11.2020

- 779 06.11.2020 PCC: New press fitting COPPER AQUAGAS V three-part male union
- 779 06.11.2020 RWC launched Reliance Valves range with push-fit connections from JG Speedfit
- 779 06.11.2020 RWC: New SharkBite push-fit fitting range to simplify compressed air installations
- 779 06.11.2020 John Guest's new Direct Buried range transforms blown fibre installations
- 779 06.11.2020 Pegler Yorkshire: Benefits of heat-free jointing methods
- 779 06.11.2020 Molecor expands its range of PVC-O pipes launching the DN1000 mm TOM® pipe
- 779 06.11.2020 Pipelife Norway: World's longest freight transport through the Suez Canal
- 779 06.11.2020 Geberit announces a very good third quarter 2020
- 779 06.11.2020 Uponor announces strong performance for all segments for the first 9 months 2020
- 779 06.11.2020 Watts Water delivered solid operating performance regarding third quarter 2020

#### globalpipe No.778 29.10.2020

- 778 29.10.2020 ARKA: Production start of PE-RT/Al pipes for its Duro System floor heating system
- 778 29.10.2020 KAN-therm UltraLine PE-RT/Al and PE-Xc piping system are DVGW and KIWA certified
- 778 29.10.2020 PRAWTECH offers PP-R pipes and fittings in diameters up to 110 mm
- 778 29.10.2020 RWC introduces new Reliance Valves' push-fit range with JG Speedfit technology
- 778 29.10.2020 ARKA expanded the offer of its Duro System floor heating system by pump groups
- 778 29.10.2020 Eurotubi: Pressfittings can also do their part in district cooling systems
- 778 29.10.2020 battenfeld-cincinnati: 1st Israeli pipe producer to opt for new-generation extruder
- 778 29.10.2020 Lubrizol was awarded by American Chemistry Council for Energy Efficieny
- 778 29.10.2020 Grupa MTP launched Buy Poland to promote Polish HVAC companies abroad
- 778 29.10.2020 Mueller Industries, Inc. reports sales results for the first three months 2020
- 778 29.10.2020 Euroconstruct: European construction sector in times of the coronavirus pandemic
- 778 29.10.2020 Pipeline Technology Conference ptc 2021 Berlin to expand into a hybrid event

#### globalpipe No.777 22.10.2020

- 777 22.10.2020 KAN-therm: Changes in pipe structure from 3-layer to 5 layer construction
- 777 22.10.2020 ISIFLO introduced new Eco Line gate valve made in composite in an imaginative way
- 777 22.10.2020 LK and Labtrino commence collaboration and launch next-generation water meter
- 777 22.10.2020 Aleris Aluminum Duffel BV has been taken over by Alvance Group on October 1st
- 777 22.10.2020 LK Armatur has entered into an agreement with Brødrene A&O Johansen A/S
- 777 22.10.2020 battenfeld-cincinnati: TECHFINE, Brazil, is new agent for Brazil, Paraguay and Bolivia
- 777 22.10.2020 KAN Group has become member of the Indian Plumbing Skills Council (IPSC)
- 777 22.10.2020 PPI and ASPE both organizations of the plumbing industry announced MOU
- 777 22.10.2020 AMR: Global Plumbing Components Market to reach \$78.21 Billion by 2027

#### globalpipe No.776 16.10.2020

- 776 16.10.2020 Eurotubi: The role of press fittings in future construction scenarios
- 776 16.10.2020 Oventrop: OVplan new version 5.1.0 System calculation made easy
- 776 16.10.2020 RIDGID adds to industry-leading press tool line with RP 350 pistol-grip
- 776 16.10.2020 Pipe Prop adjustable pipe support system achieved ICC-ES certification
- 776 16.10.2020 Oventrop remains strong in international markets Third plant in Poland is planned
- 776 16.10.2020 Eurotubi: Construction after COVID, restart will go through evolution of digital design
- 776 16.10.2020 Latin America: Construction activity 2020 will decline more than in any other region
- 776 16.10.2020 North America: Construction to fall less than expected in 2020
- 776 16.10.2020 Australasia construction output to contract by 4.8% in 2020 due to COVID-19
- 776 16.10.2020 Northeast Asia: Despite better performance in Q2, growth will slow down in 2020
- 776 16.10.2020 South+Southeast Asia: Ravaged construction industry with V-shaped recovery in 2021
- 776 16.10.2020 MENA construction sector faces severe slump in 2020+slowest regional recovery 2021
- 776 16.10.2020 Sub-Saharan Africa (SSA) construction sector to sharply slide into recession

## globalpipe No.775 09.10.2020

- 775 09.10.2020 General Fittings entered floor heating market with own radiant system line VARMO
- 775 09.10.2020 General Fittings: The all in one mixing unit TRITONE has been patented
- 775 09.10.2020 ROTH Werke: 40 years of the Original Tacker system for underfloor heating
- 775 09.10.2020 ROTH Werke: The heating pipe, the core of the system It started with PP pipes
- 775 09.10.2020 Eastern European construction output to contract by 2% in 2020
- 775 09.10.2020 Western European construction output to contract by 7.3% in 2020
- 775 09.10.2020 KWD Market+Charts: Evaluation of the Corona Effect on Heating & Plumbing pipes
- 775 09.10.2020 The 128th Canton Fair to go online from October 15-24
- 775 09.10.2020 INSTALACJE International Installation Fair Poznan (Poland) postponed to April 2021
- 775 09.10.2020 General Fittings with a new art form to communicate identity through language of art

#### globalpipe No.774 30.09.2020

- 774 30.09.2020 KE KELIT: STEELOX the world's first flexible stainless-steel piping system
- 774 30.09.2020 IVAR presents new range of screw fitting: 1 fitting for 2 pipes
- 774 30.09.2020 Heliroma: Multilayer accessories KLIMAPRESS / New range of multilayer PPSU fittings
- 774 30.09.2020 Tiemme: Now Series 1650 COBRAPRESS press fittings for multilayer pipe in Ø90mm
- 774 30.09.2020 ISCO announces national distribution agreement with Aquatherm North America
- 774 30.09.2020 NIBE Industrier AB acquires the Italian company Termotech
- 774 30.09.2020 NIBE: Continued stable growth effects of Covid have been fended off relatively well
- 774 30.09.2020 RWC released FY2020 results: 5% growth in reported net sales

- 774 30.09.2020 RWC's StreamLabs Control Wins HBSDealer's 2020 Golden Hammer Award
- 774 30.09.2020 NSF: Plumbing standard revisions tighten lead leaching criteria in drinking water

#### globalpipe No.773 23.09.2020

- 773 23.09.2020 Conex Bänninger launches new metric version of its >B< MaxiPro ACR fittings range
- 773 23.09.2020 Peštan: New PP Strong fittings and HTPP assortment expansion
- 773 23.09.2020 Molecor gives a 50 year guarantee on its TOM PVC-O pipes
- 773 23.09.2020 Aliaxis to divest South-East Asian businesses: agreement signed with LESSO Group
- 773 23.09.2020 Aliaxis and Kando to sign a strategic investment and collaboration agreement
- 773 23.09.2020 aquatherm does not take part at ISH Instead, there will be a "virtual showroom"
- 773 23.09.2020 Wavin EMEA (Europe, Middle East, Africa) will not participate at ISH 2021 due to Covid
- 773 23.09.2020 Uponor reinstates its guidance statement for 2020
- 773 23.09.2020 Plastic Pipes in Infrastructure by AMI with new date: 27-28 October 2020
- 773 23.09.2020 AHR Expo postponed to March 2021 Final decision will be announced in October
- 773 23.09.2020 Aquatherm Moscow February 2-5, 2021 A Reed Exhibition event in the New Normal
- 773 23.09.2020 Messe Frankfurt revamps spring 2021 schedule
- 773 23.09.2020 ISH 2021 to go digital Reflecting the industry

#### globalpipe No.772 14.09.2020

- 772 14.09.2020 LK Systems now presents a new PushFit-range AX for both LK PE-X and LK PAL
- 772 14.09.2020 LK Armatur is expanding its LK 522 FilterBall range now with magnet
- 772 14.09.2020 CONEX | BÄNNINGER: District heating the promising alternative
- 772 14.09.2020 Purmo: Loam heating eco clay now available -Healthy warmth thanks to loam heating
- 772 14.09.2020 Winkler Technik: The MidiClip fixing tubes on wire mesh
- 772 14.09.2020 KME Group has bundled its operations and sales activities on Osnabrück Site
- 772 14.09.2020 Light + Building took place in Shanghai in September: The show goes on
- 772 14.09.2020 ISH India offers smart and sustainable building technologies at the click of a button
- 772 14.09.2020 Viega will not participate at ISH 2021 due to Covid-19
- 772 14.09.2020 BSRIA-study highlights role of copper due to excellent electrical+thermal conductivity

#### globalpipe No.771 04.09.2020

- 771 04.09.2020 Magnum and Thermoduct join forces for sustainable climate solutions in Benelux
- 771 04.09.2020 Molecor: MCH Private Equity fund acquired a majority stake in Molecor
- 771 04.09.2020 aquatherm Metallverarbeitung GmbH & Co. KG now part of aquatherm GmbH
- 771 04.09.2020 KraussMaffei lays foundation stone for new company premises in Laatzen
- 771 04.09.2020 BRUGG Pipes Germany: Important changes in management as of August 1, 2020
- 771 04.09.2020 RIFENG F6 PUSH-FIT won the German IF Award and the highest Reddot Award
- 771 04.09.2020 POLITEK: Three-layer PP-R pipes with red layer / PP-R pipes in 90 and 110mm
- 771 04.09.2020 Ego Engineering: Polytron Comfort sewage pipes+fittings from Pro Aqua now in 75mm
- 771 04.09.2020 aquatherm Global Group's new website is online with a clean and modern design
- 771 04.09.2020 EUROCONSTRUCT special update August 2020 A visual summary
- 771 04.09.2020 Rifeng supports the unemployed group to start a small business

#### globalpipe No.770 31.08.2020

- 770 31.08.2020 Eurotis offers new patented line of XL flanging system
- 770 31.08.2020 Pipelife: Smart Probe a future proof gamechanger for water utilities

- 770 31.08.2020 Henco is expanding: New Distribution Centre Phase 1 completed
- 770 31.08.2020 Uponor North America has launched a new website
- 770 31.08.2020 Mueller Industries: Piping Systems decreased by 10.4% in H1 2020 vs. H1 2019
- 770 31.08.2020 Saint-Gobain: Significant improvement in its markets began at the end of Q2
- 770 31.08.2020 SIMONA: Solid earnings and marked downturn in revenue amid challenging conditions
- 770 31.08.2020 ISH 2021 to be a hybrid event / ISH will be supplemented by extensive digital program
- 770 31.08.2020 Aquatherm: Heat fusion melts the labor shortage
- 770 31.08.2020 Plastic Pipe and Fittings Association commissions Proposition 65 testing
- 770 31.08.2020 Could pyrolysis help the World overcome its plastic waste problem?
- 770 31.08.2020 Plastics Information Europe: European plastics companies withstand Covid-19 in H1

#### globalpipe No.769 21.08.2020

- 769 21.08.2020 Influence of the corona pandemic on the Euroconstruct forecast of construction
- 769 21.08.2020 KWD Market+Charts Europe: Report-Update April 2020 / Incl. Crisis Calculator
- 769 21.08.2020 Bänninger Kunststoff-Produkte: Extinguishing systems made of plastic with FIRETEC
- 769 21.08.2020 Nupi Industrie Italiane: New impressive NIRON Beta super manifold
- 769 21.08.2020 THE Machines build SLT 100's Series and thanks all customers who made this possible
- 769 21.08.2020 FV Plast: New, improved polyfusion welding machines with electronical regulations
- 769 21.08.2020 Aalberts accelerates strategy 'focused acceleration' / Increase in orderbook
- 769 21.08.2020 Arbonia reports H1 2020 results: Increase in profitability despite decline in revenue
- 769 21.08.2020 Borealis delivers positive Q2 financial result despite Covid + low oil price environment
- 769 21.08.2020 Aquatherm: Covid, an imperfect storm for contractors "Where do we go from here?"

# globalpipe No.768 14.08.2020

- 768 14.08.2020 Caleffi North America names Pepco Sales & Marketing as new rep firm
- 768 14.08.2020 Leminar Air Conditioning Company seals exclusive distribution deal with Zurn
- 768 14.08.2020 Zurn Industries announces its partnership with TRAX Analytics
- 768 14.08.2020 Aliaxis announces leadership transition Lenoir completed 5-year mission as CEO
- 768 14.08.2020 Polypipe Civils & Green Urbanisation appoints Clark McAllister as new Sales Director
- 768 14.08.2020 Wienerberger strengthens Managing Board for further growth
- 768 14.08.2020 GF: Solid performance in challenging times building on new opportunities
- 768 14.08.2020 Orbia: Q2 revenues decreased by 23%, mainly driven by Vestolit, Wavin and Netafim
- 768 14.08.2020 Uponor: Comparable operating profit improved in all segments in Q2
- 768 14.08.2020 Watts Water Technologies: Q2 better than expected despite negative impact of Covid
- 768 14.08.2020 Wienerberger reports solid HY 2020 results despite Covid-19

## globalpipe No.767 17.07.2020

- 767 17.07.2020 ROTHENBERGER showed new products for cutting+joining pipes at #innovationweek
- 767 17.07.2020 Reliance Worldwide Corporation's SharkBite push-to-connect transition fittings
- 767 17.07.2020 Moen takes majority stake in Smart Water Start-Up Flo Technologies
- 767 17.07.2020 IAPMO's Water Demand Calculator version 2.0 available for download
- 767 17.07.2020 PPI published new technical document for installing pipe near recessed lighting
- 767 17.07.2020 Geberit announced decline in sales as a result of COVID-19 in the first half of 2020
- 767 17.07.2020 Arbonia: Business development was influenced by the COVID-19 in H1 2020
- 767 17.07.2020 Advanced Drainage Systems has announced fourth quarter fiscal 2020 results
- 767 17.07.2020 Astral announced financial results for quarter and year ended on March 31, 2020
- 767 17.07.2020 ISH extends deadline for free exhibition-stand cancellation
- 767 17.07.2020 ISH China&CIHE + ISH Shanghai&CIHE to take place in May + Sep 2021 respectively

#### globalpipe No.766 14.07.2020

- 766 14.07.2020 Molecor: First company that achieved UNE-EN 17176 product certification
- 766 14.07.2020 Molecor: TOM pipes can withstand internal pressures up to twice nominal pressure
- 766 14.07.2020 Aquatherm has released a video about the standard Aquatherm pressure test 2020
- 766 14.07.2020 FRÄNKISCHE developed the supporting grid for the Rigofill ST modules
- 766 14.07.2020 Euroconstruct: European construction markets in the shadow of corona pandemic
- 766 14.07.2020 EECFA 2020 Eastern European Construction Forecast Report: Pandemic edition
- 766 14.07.2020 Global construction projects schedules are getting delayed due to COVID-19
- 766 14.07.2020 Construction industry of various continents: Updated press releases by GlobalData
- 766 14.07.2020 Construction industry of various countries: Updated press releases by GlobalData

# globalpipe No.765 03.07.2020

- 765 03.07.2020 COMAP has launched new range of MultiSkin multilayer connection offering
- 765 03.07.2020 HeatLink: Large dimension of F1960 PEX expansion fittings & rings now available
- 765 03.07.2020 FRÄNKISCHE new distribution structures complete SediPipe&SediSubstrator systems
- 765 03.07.2020 RIFENG Group held a groundbreaking ceremony for new production base
- 765 03.07.2020 TEPPFA's Environmental Product Declarations for plastic pipes received new look
- 765 03.07.2020 IAPMO: NSF/ANSI/CAN 61 testing and certification now available in India
- 765 03.07.2020 Purmo Group: John Peter Leesi appointed as new Chief Executive Officer
- 765 03.07.2020 Uponor unveils new venture development business function led by Doug Fulton
- 765 03.07.2020 MKS Pipe and Valve: Steven Adam appointed as new president and CEO
- 765 03.07.2020 PPI announced Building & Construction Division management committee changes
- 765 03.07.2020 Borealis + Borouge support project to supply water to 50,000 people in Mozambique

# globalpipe No.764 25.06.2020

- 764 25.06.2020 Russian Plastic Pipe Market is growing: PP-R, PEX, PE-RT and Multilayer Pipes
- 764 25.06.2020 Plastics Pipe Institute (PPI) announces projects and members of the year
- 764 25.06.2020 Versaprofiles: PPI award for geothermal ground loops for CUB Geoexchange system
- 764 25.06.2020 Advanced Drainage Systems: PPI award for HP storm PP pipe in new terminal
- 764 25.06.2020 Teel Plastics got two PPI awards: For PA 12 gas pipe and telecom network conduit
- 764 25.06.2020 WL Plastics: PPI award for HDPE pipe which was sliplined into an old sewer pipe
- 764 25.06.2020 FRÄNKISCHE: AquaLimit tube throttle shaft for controlled discharge of stormwater
- 764 25.06.2020 ISH 2021: Supporting assoc.&advisory board behind world's leading SHK trade fair
- 764 25.06.2020 MCE Mostra Convegno Expocomfort in Milano rescheduled from 8-11 March 2022

#### globalpipe No.763 19.06.2020

- 763 19.06.2020 Plastic Services and Products to acquire former Genova assets in Paducah (USA)
- 763 19.06.2020 SIMONA takes over Norwegian supplier of aquaculture piping systems
- 763 19.06.2020 Harrington Industrial Plastics: Acquisition by Nautic Partners has completed
- 763 19.06.2020 BT-Industrial: South African pipe producer recently welcomed as SAPPMA member
- 763 19.06.2020 AMUT provide additional extrusion line for expansion of Cambodian Chip Mong Group
- 763 19.06.2020 Pipelife Solutions for Hungarian epidemic diseases container hospital
- 763 19.06.2020 BSRIA: New edition of BG29: Pre-Commission Cleaning of Pipework Systems published
- 763 19.06.2020 FB Balzanelli: Video interview with Ralf Riemensperger on the Insulation Line
- 763 19.06.2020 Ceresana forecasts increase in global plastic pipe consumption in new published study
- 763 19.06.2020 New study: Global pipe+fitting market will grow despite threat of economic recession

- 763 19.06.2020 BSRIA: Growth path disrupted by the pandemic in the US HVAC&R sector
- 763 19.06.2020 SAPPMA warns: No shortcuts to pipe quality after lockdown

#### globalpipe No.762 05.06.2020

- 762 05.06.2020 quatherm launched new push-fit fittings for aquatherm blue pipe systems
- 762 05.06.2020 Viega has introduced MegaPress®G press fittings for carbon steel pipe up to 4"
- 762 05.06.2020 T.D. Williamson POLYSTOPP® Quick Connect System increases safety and speed
- 762 05.06.2020 Conex Bänninger launches new e-learning course for >B< MaxiPro press fittings
- 762 05.06.2020 Molecor: Webinar on mechanical calculation for PVC-O pressurized water networks
- 762 05.06.2020 POLYPLASTIC Group helps with plastic pipes building a hospital in days, not in month
- 762 05.06.2020 SIBUR opened new polymer logistics hub in Vorsino Industrial Park
- 762 05.06.2020 TEPPFA welcomes Tom Van Gyseghem as its new president
- 762 05.06.2020 Eurotubi completely resumed press fitting production and distribution
- 762 05.06.2020 GTAI: China no paradise for foreign suppliers of pipes / Pipes must be cheap

#### globalpipe No.761 29.05.2020

- 761 29.05.2020 Borealis decision to discontinue world-scale polyethylene project in Kazakhstan
- 761 29.05.2020 Molecor: Update of its Multiformat Catalog and BIM objects now available
- 761 29.05.2020 Ferguson: Strong revenue in February and March was adversely impacted in April
- 761 29.05.2020 PE-RT Pipes in Europe: Insights from the report KWD Market +Charts Europe 2020
- 761 29.05.2020 European construction markets: Architects expect decreasing turnover in 2020
- 761 29.05.2020 Construction industry impacted worldwide due to COVID-19 / by continents
- 761 29.05.2020 Construction industry impacted worldwide due to COVID-19 / by countries
- 761 29.05.2020 Wavin developed face shields within 2 weeks in cooper. with healthcare professionals
- 761 29.05.2020 Borealis supports face mask initiatives through production of meltblown fabrics

#### globalpipe No.760 15.05.2020

- 760 15.05.2020 COMAP launches Aquatis, a new smart solution for healthy drinking water
- 760 15.05.2020 SANHA: Drawing of pipe system with new SANHA Product Line Placer app in Revit
- 760 15.05.2020 WIELAND ecoline: New lead-free alloy portfolio for a sustainable future
- 760 15.05.2020 ACOME Group sells its subsidiary THERMACOME to Thermador Groupe
- 760 15.05.2020 WIELAND North America acquired business of specialty metals reroller Scott Brass
- 760 15.05.2020 KAN-therm Hungary has a new address / Relocation activities began in February
- 760 15.05.2020 SIMONA 2019: Growth in revenue / Earnings within target range
- 760 15.05.2020 European plumbing and HVAC installation companies expect hard times in 2020
- 760 15.05.2020 SANHA: Copper destroys viruses, could it help now?
- 760 15.05.2020 GIACOMINI: "Nothing will ever be the same again", including HVAC systems
- 760 15.05.2020 FRÄNKISCHE is converting production facilities for production of breathing hoses
- 760 15.05.2020 SIMONA donates SIMOLUX sheets for the construction of spit protection partitions

## globalpipe No.759 08.05.2020

- 759 08.05.2020 LG Chem has developed the world's first metallocene grade PE-Xa resin
- 759 08.05.2020 PEX-Pipes in Europe: Insights from the report KWD Market +Charts Europe 2020
- 759 08.05.2020 Vinidex: Chlorblue® PE100 drinking water pipe with higher water temperatures
- 759 08.05.2020 Watts Water Technologies delivered solid Q1 results despite challenges from Covid
- 759 08.05.2020 Orbia: Q1 results slightly down, mainly driven by Netafim, Wavin LatAm and Koura

- 759 08.05.2020 Wienerberger reports a strong start to 2020 despite COVID-19 pandemic
- 759 08.05.2020 Advanced Drainage Systems: Net sales increased by 23.7% in Q3 fiscal 2020
- 759 08.05.2020 PPXX Conference moves forward to be held in Sep Technical program now online
- 759 08.05.2020 TEPPFA calls for water to be classified as vital under Covid 19 restrictive measures
- 759 08.05.2020 KraussMaffei produces temples for face protection shields

#### globalpipe No.758 29.04.2020

- 758 29.04.2020 egeplast acquires majority stake in Extena, market leader for plastic pipes in Sweden
- 758 29.04.2020 Brugg Pipesystems becomes BRUGG Pipes / New appearance, logo and homepage
- 758 29.04.2020 Uponor details its operational excellence programme to secure competitiveness
- 758 29.04.2020 Rifeng Group received EPD certification
- 758 29.04.2020 NSF announces New Southeast Michigan Lab, expands plastic pipe testing capabilities
- 758 29.04.2020 Uponor: Strong first quarter for all segments / Growth of net sales by 11.5%
- 758 29.04.2020 89th EUROCONSTRUCT Conference in Stockholm will be presented at a webinar
- 758 29.04.2020 Canton Fair goes online for the first time in 63 years
- 758 29.04.2020 Covid-19 economic shock will cause global construction output to shrink by 1.4% 2020
- 758 29.04.2020 Briefing on European construction: Will Covid-19 induce another Eurozone crisis

#### globalpipe No.757 17.04.2020

- 757 17.04.2020 AlMunif Pipes/SAU got SKZ mark for its PP-R heating pipes for the first time
- 757 17.04.2020 Bin Brook Plastic/UAE got SKZ mark for its PP-R heating pipes for the first time
- 757 17.04.2020 Modern Plastic/UAE got SKZ mark for its PP-R pressure pipes for the first time
- 757 17.04.2020 Techno Plastic Industry: Oman pipe producer got SKZ mark for PP-R pressure pipes
- 757 17.04.2020 Kuraray EVALTM pipe grades complying DIN4726 2017-10 are DIN CERTCO certified
- 757 17.04.2020 REHAU launches new North American website for supporting mobility of customers
- 757 17.04.2020 Geberit announced solid net sales growth in the first quarter 2020
- 757 17.04.2020 Arbonia: Impact of COVID-19 on Arbonia
- 757 17.04.2020 Plastics Pipe Institute (PPI) announced new stormwater drainage handbook
- 757 17.04.2020 GTAI: Old sewage pipes in South Korea need to be increasingly replaced
- 757 17.04.2020 Europe ethylene output could decrease up to 8% in 2020 on coronavirus
- 757 17.04.2020 Coronavirus unlikely to be transmitted through drinking water
- 757 17.04.2020 How AI is measuring the impact of COVID-19 on construction across the US
- 757 17.04.2020 Armacell supports national face shield production in Spain
- 757 17.04.2020 Armacell supports regional relief initiatives across the USA

#### globalpipe No.756 08.04.2020

- 756 08.04.2020 KWD Market+Charts Europe: Report-Update 2020 published /Incl. Crisis Calculator
- 756 08.04.2020 Aalberts update on COVID-19: In Q1 only limited impact on operations + performance
- 756 08.04.2020 GF Business update in the light of the COVID-19 pandemic
- 756 08.04.2020 Henco update on COVID-19: Operations and deliveries still up and running
- 756 08.04.2020 Pipelife Norway announces uninterrupted supply Production is running as usual
- 756 08.04.2020 Pipelife Russia: Russia speedily builds new hospital for Corona patients
- 756 08.04.2020 Polypipe Group: Coronavirus Statement and updates on it were published
- 756 08.04.2020 RWC released its COVID-19 response to the Australian Securities Exchange (ASX)
- 756 08.04.2020 Aliaxis: Mixed performances in FY 2019 compared to record levels in 2018
- 756 08.04.2020 Polypipe Group: Further progress in challenging markets in FY 2019
- 756 08.04.2020 NIBE acquires German heat pump manufacturer WATERKOTTE GmbH
- 756 08.04.2020 GlobalData sharply revises down forecast for construction output growth globally

#### globalpipe No.755 30.03.2020

- 755 30.03.2020 aquatherm blue pipe system to feature increased pressure resistance
- 755 30.03.2020 Rifeng received NSF-61 certification for drinking water application
- 755 30.03.2020 UNICOR QSERF: New service level +future support for higher efficiency & productivity
- 755 30.03.2020 THE Machines announces the build of the 250th ROLL FORMING BENCH
- 755 30.03.2020 Viessmann invests in leading installation and service company ThermoWise
- 755 30.03.2020 KraussMaffei Group: Management change Stieler will resign from his office as CEO
- 755 30.03.2020 Ceresana report on the European market for plastic pipes newly published
- 755 30.03.2020 Amaplast: COVID-19 Green light for plastics and rubber machinery manufacturers
- 755 30.03.2020 BEKA takes a look at the connections between ceiling heating and pathogens
- 755 30.03.2020 Understanding coronavirus exposure for plumbing professionals
- 755 30.03.2020 New WHO technical brief on COVID-19 & WASH published

#### globalpipe No.754 20.03.2020

- 754 20.03.2020 Let us use the power of community a comment of the editorial team
- 754 20.03.2020 CALEFFI Group donates € 1 million to deal with the COVID-19 emergency
- 754 20.03.2020 Borealis: Operations during the Coronavirus disease (COVID-19) outbreak
- 754 20.03.2020 Danfoss: COVID-19 taking precautions to keep the business running
- 754 20.03.2020 Molecor continues with its normal activity within this global crisis
- 754 20.03.2020 NUPI: Production plants are all operational and activities continue regularly
- 754 20.03.2020 Purmo Group: Stronger together health and safety of employees highest priority
- 754 20.03.2020 Uponor withdraws guidance for 2020 lack of visibility to potential COVID-19 impacts
- 754 20.03.2020 Valsir: We are all in place production activities are proceeding regularly
- 754 20.03.2020 Wienerberger takes proactive measures to ensure sustained performance of business
- 754 20.03.2020 World Water Day & COVID-19: We all have a role to play
- 754 20.03.2020 On World Water Day, let 's tackle the grand challenges of urban public health
- 754 20.03.2020 Aliaxis teams connect local communities to clean water
- 754 20.03.2020 Construction industry holds its breath while coronavirus hits Europe
- 754 20.03.2020 Production in construction up by 3.6% in euro area up by 3.9% in EU27

#### globalpipe No.753 13.03.2020

- 753 13.03.2020 WRW: 500 million running metres of multilayer composite pipes
- 753 13.03.2020 Purmo Group has now outlined a new commercial brand strategy for its brands
- 753 13.03.2020 GF to enter strategic partnership with innovative British startup company
- 753 13.03.2020 Geberit: Change in the Group Executive Board Rapp new Head of Sales Europe
- 753 13.03.2020 NUPI Industrie Italiane obtained second EPD certification for HDPE piping system
- 753 13.03.2020 Armacell has extended its range of prefabricated AF/ArmaFlex fitting covers
- 753 13.03.2020 NSF standard for drinking water treatment units: Stricter lead reduction requirements
- 753 13.03.2020 NSF REG4 certification offers manufacturers new way to meet UK water regulations
- 753 13.03.2020 Armacell continued delivering strong profitable growth in FY 2019
- 753 13.03.2020 Borealis delivers strong FY 2019 financial result in softening market environment
- 753 13.03.2020 Rettig Group revenue for 2019 slightly higher Increase came from Purmo Group
- 753 13.03.2020 Purmo Group releases a study on deep renovation together with European experts

## globalpipe No.752 06.03.2020

752 06.03.2020 Electrical Heating Concepts has extended its product portfolio with X-MATS

- 752 06.03.2020 FB Balzanelli latest configuration makes the coiling process even faster
- 752 06.03.2020 Pegler UAE Division is getting stronger as it continues to grow in the region
- $752\,$  06.03.2020 Rifeng plans despite restrictions due to coronavirus to increase capacity by 15%
- 752 06.03.2020 Rifeng: Rapid action in the middle of the coronavirus outbreak
- 752 06.03.2020 GF Piping Systems: Strong performance economic headwinds affect overall results
- 752 06.03.2020 Armacell continued to deliver strong profitable growth in FY 2019
- 752 06.03.2020 Orbia achieved its FY 2019 guidance in line with management's expectations
- 752 06.03.2020 Saint-Gobain has delivered another significant improvement in its 2019 results
- 752 06.03.2020 SAPPMA reported: Demand grows for plastic pipes despite a struggling economy
- 752 06.03.2020 BSRIA: US market for IoT field devices set for strong growth in the next decade
- 752 06.03.2020 SHK ESSEN is being postponed: New date is in late summer, September 1-4, 2020

#### globalpipe No.751 28.02.2020

- 751 28.02.2020 THE Machines: Simultaneous completion of two multilayer pipe production lines
- 751 28.02.2020 Caleffi launches KIT 545900 eXtra Small protection pack for cleaning heating systems
- 751 28.02.2020 Besco Fittings will show new V + M copper press fittings at SHK Essen, booth 1C28
- 751 28.02.2020 Effebi launches Effebi Press Inox H2O + Gas fittings at SHK Essen on booth 5B09
- 751 28.02.2020 German Pipe Industrie- & Fernwärmetechnik: Name changes to BRUGG German Pipe
- 751 28.02.2020 ROTEX Heating Systems from 01.04.2020: DAIKIN Airconditioning Germany GmbH
- 751 28.02.2020 Aalberts: Solid+resilient performance in a more difficult market environment in FY19
- 751 28.02.2020 Wienerberger: Record results despite flat end markets in 2019
- 751 28.02.2020 NORMA Group increases its sales in FY 2019 through acquisitions and currency effects
- 751 28.02.2020 District energy can decarbonize the EU heating and cooling sector
- 751 28.02.2020 SHK Essen starts on 10 March with BeNneLux&France Day/Information on coronavirus
- 751 28.02.2020 MCE Mostra Convegno Expocomfort in Milano postponed to September 8-11, 2020

# globalpipe No.750 21.02.2020

- 750 21.02.2020 Gebo: Multigebo brass compression fittings for multilayer pipes now in 25/26mm
- 750 21.02.2020 Legend has launched patent-pending P-571NL LegendPress™ dielectric unions
- 750 21.02.2020 Legend: New large diameter PPSU PEX pipe fittings are offered in multiple sizes
- 750 21.02.2020 NIBCO latest news: press slip ball valve+extended repair coupling/tailpiece/additions
- 750 21.02.2020 Pegler: Streamlined solution incorporates valve and fitting in one product
- 750 21.02.2020 Pegler increases valve offering with mini modular valve solution made of DZR brass
- 750 21.02.2020 Danfoss: New AB-QM 4.0 Pressure Independent balancing and Control Valve (PICV)
- 750 21.02.2020 LK Armatur extends its range of LK 551 HydroMix now with a higher Kvs value
- 750 21.02.2020 Nupi: Oxygen barrier pipe solution NIRON OB completes range of NIRON System
- 750 21.02.2020 MPC: The first ISRS v. 8 certificate in Poland granted to Multilayer Pipe Company
- 750 21.02.2020 ABN//INSTAL CT FASER RD FIRE fire installation pipe system obtained FM Approval
- 750 21.02.2020 NIBCO has completed acquisition of Milwaukee Valve Company in November 2019
- 750 21.02.2020 Pipelife: We prevent plastics from escaping into nature
- 750 21.02.2020 ABN Pipe Systems joined the Circular Plastics Alliance

## globalpipe No.749 17.02.2020

- 749 17.02.2020 Factory of Polymeric Tube JSC launched flexible pre-insulated TVEL-ECOPEX pipes
- 749 17.02.2020 SANHA first to obtain a certificate for its press fittings for use with hydrogen
- 749 17.02.2020 VorTek Instruments SonoPro® ultrasonic flow meters was shown at at AHR Expo
- 749 17.02.2020 Caleffi North America introduced innovative 4-port scald protection valve at AHR Expo

- 749 17.02.2020 Sica launched new electric saw for HDPE, PP-R multilayer and PVDF pipes
- 749 17.02.2020 Sica: New P3500/24 Plus haul-off for extrusion lines of large and thick HDPE pipes
- 749 17.02.2020 Polypipe Civils & Infrastructure changes name to Polypipe Civils & Green Urbanisation
- 749 17.02.2020 Zurn Industries acquire Just Manufacturing to deliver more finished plumbing content
- 749 17.02.2020 Aliaxis signs agreement to divest US distributor Harrington Industr. Process Solutions
- 749 17.02.2020 Uponor: Positive profitability development continued in FY 2019
- 749 17.02.2020 Watts Water Technologies reports solid finish to 2019 with sales in FY 2019 up 2%
- 749 17.02.2020 Advanced Drainage Systems generated very strong results for Q3 fiscal 2020
- 749 17.02.2020 BSRIA's presentation at AHR Expo focuses on global HVAC market opportunities

#### globalpipe No.748 07.02.2020

- 748 07.02.2020 Armacell: ArmaFlex Ultra with FlameDefense™ technology received UL classified mark
- 748 07.02.2020 Phyn Plus Pro Edition launched: Smart home device meets full needs of home builders
- 748 07.02.2020 Grant opened new facilities and recently launched Uflex underfloor heating system
- 748 07.02.2020 Maillefer: Composite pipe production Doubled without trouble
- 748 07.02.2020 Extron-Mecanor supplied FL-Pipe with different, never before built production line
- 748 07.02.2020 Future construction volumes in key European markets only the UK will decrease
- 748 07.02.2020 Briefing on European construction: Update on the UK construction market
- 748 07.02.2020 AMAPLAST: No encouraging FY forecast for Italian plastics machinery manufacturers
- 748 07.02.2020 Mueller Industries reported Q4 and FY 2019 results Outlook remains positive

## globalpipe No.747 03.02.2020

- 747 03.02.2020 KAN-therm UltraLine new 2020 in KAN-therm offer, will be shown for 1st time in Czech
- 747 03.02.2020 Uponor North America launches labor-saving ProPEX® EP reducing tees series
- 747 03.02.2020 KAN-therm introduced press fitting System KAN-therm Copper and Copper GAS
- 747 03.02.2020 KAN-therm has launched new KAN-therm stainless steel manifolds
- 747 03.02.2020 Pro Aqua PP-R manifold for hot & cold water, novelty presented by Ego Engineering
- 747 03.02.2020 Magnaplast will present its high quality sewage systems at MCE in Milan in March
- 747 03.02.2020 POLYPLASTIC Group will show new PROTECT RC Detect pipe at Aquatherm Moscow
- 747 03.02.2020 POLYPLASTIC Group launched a pilot blockage solution for marking pipe products
- 747 03.02.2020 Aalberts invests in new facilities for the eco-friendly building end market in Benelux
- 747 03.02.2020 HARCO Fittings acquired largest pure pipe fitting manufacturer in NA Specified Fittings
- 747 03.02.2020 Metro Concepts East Africa Limited acquires Metro Plastics (Kenya) plastic business
- 747 03.02.2020 Georg Fischer: Changes to the Board of Directors and the Executive Committee of GF
- 747 03.02.2020 Plastics Pipe Institute (PPI) has named David M. Fink as its new president

## globalpipe No.746 27.01.2020

- 746 27.01.2020 Panchakanya/Nepal is the first company in Asia to introduce CPVC transparent fittings
- 746 27.01.2020 Panchakanya/Nepal launches CPVC Flame Pro fire sprinkler system
- 746 27.01.2020 Viega MegaPress CuNi press fitting system now available in sizes up to 4"
- 746 27.01.2020 Guray A.S. Emirplast will show new sliding sleeve axial fitting & developments at MCE
- 746 27.01.2020 Reliance Worldwide Corporation: Sharkbite Transition Ball Valves coming mid 2020
- 746 27.01.2020 Bonomi Group will present its newly released App and valves & fittings at MCE 2020
- 746 27.01.2020 FB Balzanelli introduces the latest development in large diameter coiling
- 746 27.01.2020 Pipelife: YouTube channel Skill Builder features Pipelife facility in Ireland
- 746 27.01.2020 Bonomi Group becomes stronger with 100% acquisition of Fra.Bo S.p.A.
- 746 27.01.2020 Danfoss agrees to acquire Eaton's Hydraulics business for approx. 3.0 billion EUR

- 746 27.01.2020 Wavin Ekoplastik s.r.o.'s business name is changed to Wavin Czechia s.r.o.
- 746 27.01.2020 Geberit: First information on 2019 Convincing currency-adjusted sales growth
- 746 27.01.2020 Arbonia continues to grow especially pleasing developments in HVAC Division
- 746 27.01.2020 Remeha hydrogen admixture boilers first to be Kiwa certified

#### globalpipe No.745 17.01.2020

- 745 17.01.2020 HUMMEL launched UBA-compliant compression fitting solutions for drinking water
- 745 17.01.2020 HUMMEL: Steel pipe adapter for drinking water systems successfully DVGW certified
- 745 17.01.2020 BROEN will present its new developed unique Full Flow valve Ballofix® at SHK Essen
- 745 17.01.2020 PTI launches industry first pipe insulation InnoShieldTM with innovative outer coating
- 745 17.01.2020 Tessenderlo Group to acquire REHAU Tube plant in France
- 745 17.01.2020 PAI Partners and KIRKBI A/S agree to acquire Armacell from Blackstone
- 745 17.01.2020 ASHRAE breaks ground on its new global headquarters renovation project
- 745 17.01.2020 AMI: Learn from case studies at Plastic Pipes in Infrastructure 2020 on April 28-29
- 745 17.01.2020 Upcoming HVAC trade shows between January and March 2020
- 745 17.01.2020 Watergen to launch new application for its innovative water-from-air-solution
- 745 17.01.2020 European Commission: Provisional agreement improving quality of drinking water

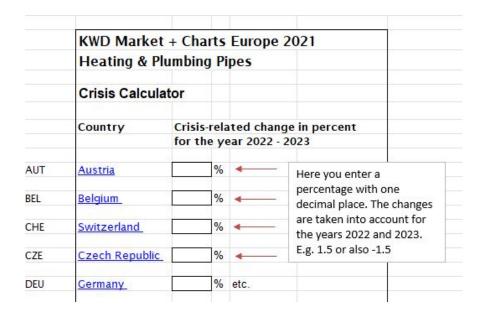
# 6 KWD Crisis Calculator – handles unexpected crises

The Corona pandemic showed us that unexpected events can put such a strain on an economic area that it has a massive impact on all sectors.

For our latest issue of our KWD Market + Charts Report, we developed the crisis calculator to estimate the Corona effects. At present, we are struggling with supply bottlenecks and raw material shortages. We don't even want to imagine other problems that have an impact on the construction industry, but if there's one thing we've learned in the last two years, it's that undesirable things can sometimes happen very quickly.

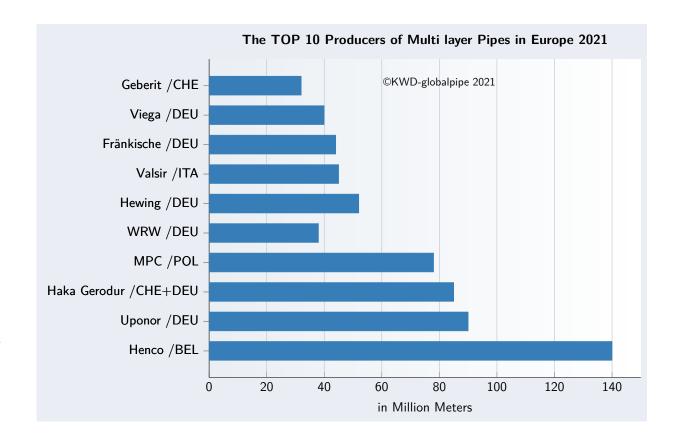
In order to be able to influence any effects that may arise as a result of any problems, we have decided to supply the crisis calculator tool again. This allows special effects to be taken into account for the years 2022 and 2023. The pipe consumption figures will then be recalculated according to individual estimates.

In the crisis calculator, a change in percent can be entered for each country. The figures for 2019 to 2021 are fixed, but the figures for 2022 and 2023 are then converted according to the change entered. The exact procedure is explained in the crisis calculator (an Excel file).



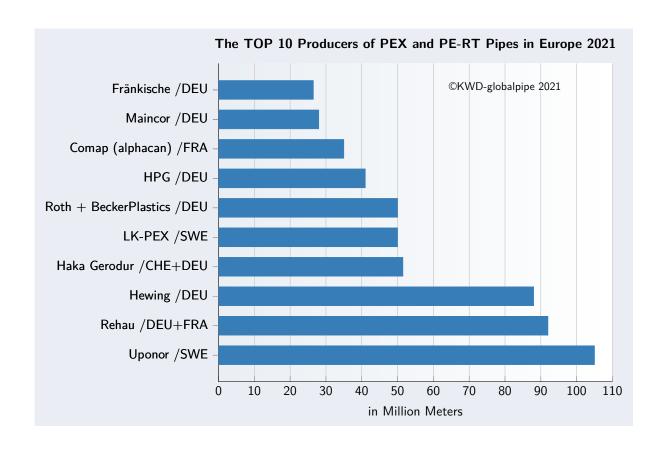
# 7 TOP 10 Producers of Heating & Plumbing Pipes in Europe

# 7.1 TOP 10 Producers of Multi layer Pipes



Manufacturer:	Inliner Material:
Fränkische /DEU	PE-Xb
Geberit /CHE	PE-Xb
Haka Gerodur /CHE+DEU	PE-Xc, PE-RT
Henco /BEL	PE-Xc, PE-RT
Hewing /DEU	PE-Xc, PE-RT
MPC /POL	PE-Xc, PE-RT
Uponor /DEU	PE-RT
Valsir /ITA	PE-Xb
Viega (Gabo) /DEU	PE-Xc
WRW /DEU	PE-Xb, PE-RT

# 7.2 TOP 10 Producers of PEX and PE-RT Pipes



Manufacturer:	Pipe Material:
$Roth + BeckerPlastics \ / DEU$	PE-Xc, PE-RT
Comap (alphacan) /FRA	PE-Xb
Fränkische /DEU	PE-Xa, PE-Xb, PE-RT
Haka Gerodur /CHE $+$ DEU	PE-Xc
Hewing /DEU	PE-Xc, PE-RT
HPG /DEU	PE-Xc, PE-RT
Maincor /DEU	PEX-C, PE-RT
Rehau /DEU+FRA	PE-Xa
LK-PEX /SWE	PE-Xa
Uponor /SWE	PE-Xa

# 8 Company Profiles

# A.T.P. - Advanced Plastic Technologies S.r.l.

Avanzate Tecnologie Plastiche ITALY - Barletta (BT) www.atpsrl.net

#### **Company Profile:**

A.T.P. s.r.l. has been working in the field of plastics transformation from over fifty years and produces pipes and fittings in PP-R used for the transport of fluids under pressure with high and low temperatures and drip irrigation pipe and hoses in PE.

#### Fittings, Manufacturer of:

Welding, gluing or electrofusions fittings

#### Pipes, Manufacturer of:

- PF
- Pipes / PP-R composite fibre
- PP-R

#### Application / Others:

Irrigation

# ABN Pipe Systems, S.L.U.

SPAIN - A Coruña www.abnpipesystems.com

#### **Company Profile:**

ABN Pipe Systems is the ABN Group's production plant in Medina del Campo, where they manufacture pipe systems fabricated with thermoplastic materials for the construction industry, civil works, industrial work and telecommunications. The building works started in 2006 launching their first production line in the beginning of 2008. It is the first Spanish company to develop multi layer PP piping systems.

#### Pipes, Manufacturer of:

- PE
- Pipes / PP-R composite fibre
- PP-R

#### **Application / Others:**

Drainage, sanitary sewer

## **Acome**

FRANCE - Paris www.acome.fr

#### **Company Profile:**

Acome Département Batiment has maintained its activities since its creation in 1932. The company is the leading French manufacturer of PE-Xc tubes for the building industry. With buildings totaling an area of 115,000  $\rm m^2$  encompassing manufacturing, ACOME's industrial facility in Normandy is one of Europe's biggest.

#### Fittings, Manufacturer of:

Press fittings, radial

#### Pipes, Manufacturer of:

PE-Xc

#### Application / Others:

- Surface heating and cooling, electrical
- Surface heating and cooling, warm water

#### AGRU Kunststofftechnik GmbH

AUSTRIA - Bad Hall www.agru.at

#### **Company Profile:**

AGRU Kunststofftechnik GmbH is a major, international manufacturer of innovative plastic products such as piping systems, semi-finished products, concrete protective liners and geomembranes. The headoffice and 4 production facilities are located in Austria. The impressively high percentage of exports at some 90% and the global sales network, which encompasses more than 80 countries, does illustrating AGRU's global market presence.

#### Pipes, Manufacturer of:

- PE
- PP
- PP-R

#### Application / Others:

 Large diameter pipes e.g. sewage pipes

# Alfatubo – Empresa de Plásticos Técnicos, Lda.

PORTUGAL - Serzedo - V.N. Gaia www.alfatubo.pt

#### **Company Profile:**

Alfatubo is a manufacturer of plastic pipes and fittings. It supplies safe distribution of potable water, natural gas distribution, waste water management, sanitary facilities, central heating in buildings, geothermal energy, cable protection, telemetry and much more.

#### Pipes, Manufacturer of:

- PE
- PE-RT
- PP-R

#### **Application / Others:**

- Drainage, sanitary sewer
- Gas

#### APE Raccorderie s.r.l.

ITALY - Sarezzo (BS) www.ape-raccorderie.com

#### **Company Profile:**

APE Raccorderie s.r.l. is specialized in production of brass fittings for copper, PEX and PEX/AI/PEX pipe, starts in July 2008 its own production of PEX/AI/PEX pipe. The company bought a high capacity Maillefer line, covering the range 14-32mm. Most of the production will be PE-Xb/AI/PE-Xb type, but PE-RT/AI/PE-RT, in 16mm only, will be produced for under floor heating application as well. Purchase of the second production line of multi layer pipe; operational by the first half of 2015.

#### Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial

## Pipes, Distributor of:

- PE-Xc
- PE-Xc / Al / ...

# Pipes, Manufacturer of:

■ PE-Xb / Al / ...

# Application / Others:

- Gas
- Manifolds
- Surface heating and cooling, warm water

# Aquatechnik Group S.p.A.

ITALY - Magnago (MI) www.aquatechnik.it

#### **Company Profile:**

aquatechnik group produces and distributes sanitary, heating, conditioning and compressed air systems for civil and industrial installations. The production seat in Magnago (MI) has got a pressing injection area, an extrusion section and a machine-shop arranging the necessary equipments to work with the different piping systems.

# Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Welding, gluing or electrofusions fittings

## Pipes, Distributor of:

- PE-Xb
- PE-Xb / Al / ...

#### Pipes, Manufacturer of:

- PE-RT
- Pipes / PP-R composite fibre
- PP-R

#### Application / Others:

- District/local heating
- preinsulated pipes
- Surface heating and cooling components
- Surface heating and cooling, warm water

# aquatherm GmbH

GERMANY - Attendorn www.aquatherm.de

## **Company Profile:**

Aquatherm GmbH is a family business which was founded in 1973. Today aquatherm is a global player and is present in 75 countries. The company is market leader in various sectors and a innovative medium seized company which can compete with the large ones. One principle of aquatherm is to protect the environment in all stages of their production.

## Fittings, Manufacturer of:

- Sliding sleeves / press fittings, axial
- Welding, gluing or electrofusions fittings

#### Pipes, Distributor of:

- PE-Xc / Al / ...
- PP-R / AI / ...

# Pipes, Manufacturer of:

- PB
- PE-RT
- Pipes / PP-R composite fibre
- PP-R
- PP-R Stabi (AI)

## Application / Others:

- Surface heating and cooling components
- Surface heating and cooling, warm water

## BAMPI S.p.A.

ITALY - Lonato (BS) www.bampi.it

#### **Company Profile:**

Since 1977 Bampi SpA has been present in the hidro-thermo-sanitary field successfully. Today Bampi SpA has a wide range of articles for sewage, floor heating and cooling, water distribution, suitable for most of technical requirements of installation.

# Fittings, Distributor of:

- Compression screw fittings
- Press fittings, radial

#### Fittings, Manufacturer of:

 Welding, gluing or electrofusions fittings

#### Pipes, Distributor of:

- PE-Xb / Al / ...
- PE-Xc / Al / ...

# Pipes, Manufacturer of:

■ PP-R

#### **Application / Others:**

Surface heating and cooling, warm water

# Bänninger Kunststoff-Produkte GmbH

GERMANY - Reiskirchen www.baenninger.de

#### **Company Profile:**

Bänninger Reiskirchen is a well known manufacturer of plastic pressure pipes and fittings working on a high quality and safety level for decades. The headquarter with central warehouse as well as the only German production facility for PVC-U fittings is located at Reiskirchen. Also PE fittings up to a dimension of d 500 are being produced at this site. The PP-R/PP-RCT Pipes and Fittings are produced at Staßfurt by Bänninger Rohrleitungssysteme GmbH, which is a 100% subsidiary of Bänninger Kunststoff-Produkte GmbH, Reiskirchen.

#### Fittings, Manufacturer of:

Welding, gluing or electrofusions fittings

#### Pipes, Manufacturer of:

- Pipes / PP-R composite fibre
- PP-R
- PP-R Stabi (AI)

# **Becker Plastics GmbH**

GERMANY - Datteln www.becker-plastics.de

#### **Company Profile:**

Becker Plastics GmbH started its production in 1979. Today, Becker Plastics has established itself as one of the five largest European pipe manufacturers of standard and special plastic pipe solutions in Europe. Their technical know-how ensures the production of premium pipes – from small batches through to the production of large quantities. The company invests mainly in PE-RT and PEX pipes. Their PP-R production was taken over by Beku Kunststoffwerke GmbH & Deck KG.

#### Pipes, Manufacturer of:

- PE
- PE-RT
- PE-RT / AI / ...
- PE-Xc
- PE-Xc / Al / ...

#### Application / Others:

• OEM Pipe manufacturer

# Beku GmbH & Co.KG

GERMANY - Beverungen www.bqtherm.com

#### Fittings, Manufacturer of:

Welding, gluing or electrofusions fittings

#### Pipes, Manufacturer of:

- Pipes / PP-R composite fibre
- PP-R
- PP-R Stabi (AI)

# **Application / Others:**

• OEM Pipe manufacturer

# **BQ-Rohrsysteme GmbH**

GERMANY - Beverungen-Wuergassen www.bq-germany.de

#### **Company Profile:**

BQ is a German private owned company. BQ is a producer of a complete range of PP-R pipes and fittings in green colour for hot and cold water. The pipes and fittings are produced according to the German Standards - SKZ and DVGW certified.

#### Pipes, Manufacturer of:

- Pipes / PP-R composite fibre
- PP-R
- PP-R Stabi (AI)

# Braseli Tubos y Accesorios, S.A.U.

Grupo Plásticos Ferro (GPF) SPAIN - Lantarón (Alava) www.braseli.com

# **Company Profile:**

Braseli Tubos is a company that belongs to the Grupo Plásticos Ferro (GPF) group of companies with its Brand FERROPLAST. GPF, a leading group in the piping and plastic accessories sector in the Iberian Peninsula, and one of the pioneers in the manufacture of PEX pipes.

#### Fittings, Distributor of:

- Press fittings, radial
- Sliding sleeves / press fittings, axial

# Pipes, Manufacturer of:

- PE-RT
- PE-RT / Al / ...
- PE-Xb

#### Application / Others:

- Control technology and equipment
- Gas
- Manifolds
- Pipefitter's, crimp tools/clamps
- Surface heating and cooling components
- Surface heating and cooling, warm water

#### Bucchi S.r.l.

ITALY - Lugo (RA) www.bucchi.it

#### **Company Profile:**

The Company Bucchi was founded in 1973 for production of moulds for other companies. In 1976 the founder, Domenico Bucchi, anticipated the market trends. The Company started transformation of plastic materials, called techno-polymers and thus developed innovative products: fittings and valves.

## Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Welding, gluing or electrofusions fittings

# Pipes, Distributor of:

■ PP-R

- Manifolds
- Pipefitter's, crimp tools/clamps

# Caleffi S.p.a.

ITALY - Fontaneto d'Agogna (NO) www.caleffi.it

#### **Company Profile:**

The company, a leader in the production of Italian-made components for domestic and industrial heating, air conditioning and plumbing systems, and an expert supplier of state-of-the-art system solutions, has celebrated its fiftieth year of activity in 2011. In 2014 more than 1,000 employees all over the world, 15 companies, 3 manufacturing premises all set in Italy and more than 70 active markets.

#### Fittings, Manufacturer of:

Compression screw fittings

#### Pipes, Distributor of:

- Copper
- Stainless steel

## Application / Others:

Manifolds

# Capricorn S.A.

POLAND - Świebodzice www.capricorn.pl

#### **Company Profile:**

Capricorn manufactures components for heating and sanitary installations. The consistency of their systems is confirmed by our policy - all in one place - One Factory All Products, all components are manufactured in the plant in Świebodzice.

#### Pipes, Manufacturer of:

■ PE-RT

#### **Application / Others:**

- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

#### Coes Company S.r.l.

ITALY - Pioltello (MI) www.coescompany.com

#### **Company Profile:**

Coes Company has been a member of Gruppo Seri Spa from Italy since September 2011. Headquarter, main distribution logistics centre and the main production of PE and PP drainage systems as well as PP-R pipes and fittings are located in Pioltello (MI). The PE-Xb multi layer pipe production as well as the BluePower® and PhoNoFire® drainage system production are in Ascoli (FG).

## Fittings, Manufacturer of:

- Press fittings, radial
- Sliding sleeves / press fittings, axial
- Welding, gluing or electrofusions fittings

#### Pipes, Distributor of:

- PE
- PE-Xa

## Pipes, Manufacturer of:

- PE-Xb / Al / ...
- PP-R

- Surface heating and cooling components
- Surface heating and cooling, warm water

#### **COMAP** France

Headquarters - Siège social FRANCE - Lyon Cedex 08 www.comap.fr

#### **Company Profile:**

With over 60 years' experience in HVAC, COMAP applies its industrial know-how to develop solutions for the complete spectrum of installations, from generator to emitter. In 2006 COMAP joined Aalberts Industries (AI) NV. COMAP took over the PE-Xb production of alphacan.

## Fittings, Manufacturer of:

- Press fittings, radial
- Sliding sleeves / press fittings, axial
- Welding, gluing or electrofusions fittings

# Pipes, Distributor of:

- PE-RT / AI / ...
- PE-Xc / Al / ...

## Pipes, Manufacturer of:

■ PE-Xb

#### **Application / Others:**

- Manifolds
- Pipefitter's, crimp tools/clamps
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Comisa S.p.A.

ITALY - Pisogne (BS) www.comisa.it

#### **Company Profile:**

COMISA's mission is to produce plumbing items meeting the highest quality and reliability available in the markets where they are present. Today, almost 45 years since the founding of COMISA, the product range has expanded to over 3.000 articles and "niches" such as radiant heating, which were such only ten years ago, today are leading sectors of the company.

# Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Push fit fittings / tool-less fittings

#### Pipes, Distributor of:

- PE-RT
- PE-RT / AI / ...
- PE-Xa

- Manifolds
- Pipefitter's, crimp tools/clamps
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Coprax S.A.

PORTUGAL - Ovar www.coprax.com

#### **Company Profile:**

COPRAX is a Portuguese-Italian company that manufactures and commercializes pipe systems for hot and cold pressurized water transportation. It was established in 1989, representing the PP-R COPRAX® pipe system. During this period, it combined an excellent product with the capability to always do more and better. An excellent commercial relationship with its supplier – Prandelli – led to a strong and coherent partnership between the two companies, which was formed in 1997, with the responsibility of developing the Portuguese and Spanish markets, as for all the Portuguese speaking countries (PALOP's). Today, in cooperation with its business partner, presents various markets and cultures a wide range of solutions. Some of the systems manufactured are the Polypropylene (PP-R) Coprax®, Polyethylene (PEX) Tuborama® and the Multilayer (PEX-AL-PEX) Multyrama® Pipe Systems.

#### Pipes, Distributor of:

- PE-Xb
- PE-Xb / Al / ...
- PE-Xc

#### Pipes, Manufacturer of:

Pipes / PP-R composite fibre

■ PP-R

#### Application / Others:

Distributor

# Corac s.r.l.

ITALY - Albonese (PV) www.corac.it

#### **Company Profile:**

Corac, founded in 1983, produces a series of compression fittings and manifolds.

#### Fittings, Manufacturer of:

Compression screw fittings

#### Pipes, Distributor of:

- PE-X
- PE-X / AI / ...

#### Application / Others:

Manifolds

# Danfoss A/S - Floor Heating Hydronics

DENMARK - Vejle, Syddanmark heating.danfoss.com

## **Company Profile:**

Danfoss was the original inventor of both the radiator thermostat and the automatic differential pressure controller. Today, they have been serving the needs of the heating industry for almost 80 years and are a market leader in automatic heating control technology.

#### Pipes, Distributor of:

- PE-RT
- PE-RT / Al / ...
- PE-Xa

- Surface heating and cooling components
- Surface heating and cooling, electrical
- Surface heating and cooling, warm water

# Duopipe Systems Unipessoal, Lda.

Auray Managing Group PORTUGAL - Gião - Vila do Conde www.duofil.com

#### **Company Profile:**

1992 Duofil began as an industrial project, for the extrusion of UPVC for the building market. Today Duofil produces pipes for heating and cooling facilities as well as for industrial installations, electrical cable production and automobile industries.

#### Pipes, Manufacturer of:

- PE
- PE / Al / ...
- PE-RT
- PE-RT / AI / ...
- PE-Xa
- PE-Xb
- PE-Xb / Al / ...
- PP
- PP-R

#### Application / Others:

Gas

# **Durapipe UK**

UNITED KINGDOM - Cannock, Staffordshire www.durapipe.co.uk

#### **Company Profile:**

Durapipe UK is a leading manufacturer of high performance, thermoplastic pipework systems. With 60 years of experience, our portfolio of products are widely used around the World for many different applications. Durapipe UK is a trade name of Glynwed Pipe Systems Ltd. Company Number 1698059.

#### Pipes, Manufacturer of:

- PP
- PVC
- PVC-C

# ELPLAST+ Sp. z o.o.

POLAND - Jastrzębie Zdrój www.elplastplus.pl

# **Company Profile:**

ELPLAST+ is a private company,100% Polish family ownership capital of Anna Pawelak and Teresa Pawelak, producing PE and PP pipes and profiles by extrusion moulding, and also large-size and small-size PE products by rotational moulding. The company is the authorized distributor of the Victaulic system in Poland.

#### Pipes, Manufacturer of:

- PE
- PE-RT
- Pipes / PP-R composite fibre
- PP
- PP-R

- District/local heating
- Drainage, sanitary sewer
- Large diameter pipes e.g. sewage pipes
- preinsulated pipes



ITALY - Vigonovo di Fontanafredda (PN) www.emmeti.com

#### **Company Profile:**

Emmeti S.p.A., founded 1976, is operating by selling and distribution of components for heating installation. Today Emmeti operates in over 65 countries around the world with three manufacturing plants. Emmeti tested and started a second production line for Gerpex PEX/AI/PEX pipe in 2013. This leads the production capacity to over 35 million meters per year. In 2015 Rettig ICC /NLD acquired 91% of Emmeti S.p.A. Synergy results are achieved through a cooperation between the two companies Emmeti and FIV (valves and fittings).

## Fittings, Manufacturer of:

Compression screw fittings

Press fittings, radial

### Pipes, Distributor of:

- PE-RT
- PE-Xc
- PP-R

# Pipes, Manufacturer of:

- PE-RT / AI / ...
- PE-Xb / Al / ...

# **Application / Others:**

- Drainage, sanitary sewer
- Gas
- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

#### **EMPUR Produktions GmbH**

GERMANY - Buchholz-Mendt empur.com

#### **Company Profile:**

EMPUR was founded in 1997. The company relies on manufacturing penetration. About 90% of the components of heating piping systems and sanitation piping systems are produced by themselves with their own responsibility.

# Fittings, Manufacturer of:

Compression screw fittings

## Pipes, Distributor of:

- PE-RT / Al / ...
- PE-Xa

## Pipes, Manufacturer of:

- PE-RT
- PE-Xc

- Control technology and equipment
- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

#### **Enetec GmbH**

Extrusion
GERMANY - Kleve
www.enetec.info

#### **Company Profile:**

Enetec combines thirty years of experience as a manufacturer of components for the heating and cooling industry (e.g. insulation boards, control systems, manifolds) with two production sites in Italy and one in Germany. The company belongs to the – in Italy headquartered – E Group which was created in 2010, encompassing Eurotherm, Enetec, Ecoform and the three business units (Ecoen, Eureca, Eurass). The plant for pipe extrusion is in Kleve, Germany. The OEM partner Enetec produces PE-RT pipes in diamters 8-32mm.

#### Pipes, Manufacturer of:

■ PE-RT

# Application / Others:

OEM Pipe manufacturer

# Enolgas Bonomi S.p.A.

ITALY - Concesio (BS) www.enolgas.it

#### **Company Profile:**

Founded in 1960 as a family business, specialising in the production of brass ball valves, Enolgas Bonomi is now a group with a diverse range of products and a strong presence in international markets.

## Fittings, Manufacturer of:

 Sliding sleeves / press fittings, axial

#### Pipes, Distributor of:

■ PE-Xc / Al / ...

# **EQtherm GmbH Flächenheizungen**

GERMANY - Raubach www.eqtherm.de

#### Fittings, Distributor of:

Press fittings, radial

#### Pipes, Distributor of:

- PE-RT
- PE-RT / AI / ...
- PE-Xa
- PE-Xc

- Control technology and equipment
- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Esta Rohr GmbH

GERMANY - Siegen-Kaan-Marienborn www.esta-rohr.de

#### Pipes, Manufacturer of:

- Stainless steel
- Steel

# **Eurotherm spa**

ITALY - Frangart (BZ) www.eurotherm.info

#### Pipes, Distributor of:

- PE-RT
- PE-Xa
- PE-Xc

## Application / Others:

- Surface heating and cooling components
- Surface heating and cooling, warm water

# Eurothex HI-Performance - B2B S.r.l.

(formerly Biemme S.r.l.) ITALY - Groppoli (MS) www.eurothex.it

#### **Company Profile:**

Biemme S.r.l. was founded in 1999 as a supplier of floor heating systems. In 2008 Biemme started with PE-Xa pipe production on an own extrusion line in Spain. Brandname is Eurothex. In 2010 was production start of brass manifolds and in 2011 of thermoformed panels. In 2015(?) the company name changed into Eurothex HI-Performance B2B S.r.l. In 2015/2016 the company invested in a new PEX/PE-RT extrusion line.

#### Pipes, Manufacturer of:

- PE-RT
- PE-Xa

## **Application / Others:**

- Surface heating and cooling components
- Surface heating and cooling, warm water

#### Eurotubi Europa s.r.l.

ITALY - Nova Milanese (MI) www.pressfitting.it

#### **Company Profile:**

For more than 50 years Eurotubi Europa is the established presence at the international level in the sector of tube working in account of the clients. Today Eurotubi Europa has a leader position on the national and international market regarding bending of tubes of large diameter. At present the major efforts are oriented to develop a new product — Eurotubi Pressfitting System, the sector launched only a few years ago.

## Fittings, Manufacturer of:

• Press fittings, radial

# Pipes, Distributor of:

- Stainless steel
- Steel

# Feichtenschlager GmbH

GERMANY - Neusäß-Täfertingen www.feichtenschlager.com

# Fittings, Distributor of:

• Press fittings, radial

#### Pipes, Distributor of:

Stainless steel

# FERSIL - Freitas & Silva, S.A.

PORTUGAL - Oliveira de Azemeis www.fersil.com

#### **Company Profile:**

FERSIL is a portuguese company, producer of pipes and fittings in plastic, for sewage, sanitation, drainage, construction and irrigation systems.

#### Pipes, Manufacturer of:

- PE
- PP
- PP-R
- PVC

# Application / Others:

- Corrugated Pipes
- Drainage, sanitary sewer
- Gas
- Irrigation
- Large diameter pipes e.g. sewage pipes

# Filinox-Flexinox, S.A.

SPAIN - Barcelona www.inoxidables.com

# Fittings, Distributor of:

Press fittings, radial

# Pipes, Distributor of:

Stainless steel



SPAIN - Albacete www.fittingsestandar.com

#### **Company Profile:**

Fittings Estándar, founded in 2000, manufacture and market plumbing and heating systems. They offer piping systems with compression, press and sliding sleeve fittings. Furthermore they expanded their product range with an AENOR certified PP-R piping system up to 160mm.

# Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Sliding sleeves / press fittings, axial

#### Pipes, Distributor of:

- PE-RT / AI / ...
- PE-Xa
- PE-Xb / Al / ...
- PP-R

## Application / Others:

Surface heating and cooling, warm water

#### FIV S.r.l.

ITALY - Ponte S. Marco - Calcinato (BS) www.fiv.it

#### **Company Profile:**

F.I.V. Fabbrica Italiana Valvole S.R.L. is a producer of ball valves and brass components for heating and potable water systems since 1984, by providing ever more complete and advanced solutions. ISO 9001 ball-valves, radiators valves, brass fitting and multi layer pipes and press fittings certified production allows FIV to be one of the most complete companies in this field.

## Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial

## Pipes, Distributor of:

- PE-RT / Al / ...
- PE-Xb / Al / ...
- PE-Xc

#### Application / Others:

- Manifolds
- Surface heating and cooling, warm water

#### **FOMA Divisione Rame**

ITALY - Bedizzole (BS) www.foma.it

# Pipes, Manufacturer of:

- Copper
- Copper and plastic

# **Application / Others:**

Gas

# FRABO S.p.A.

ITALY - Milano www.frabo.net

#### **Company Profile:**

FRABO SpA is a leading manufacturer of fittings made of copper and other materials. Founded in 1969 by 5 brothers, today the Company produces, with the most advanced equipment and technologies, press-fittings, soldering fittings and compression fittings for gas and water installations.

#### Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Welding, gluing or electrofusions fittings

#### Pipes, Distributor of:

■ PE-Xc / Al / ...

# FRÄNKISCHE Rohrwerke

Gebr. Kirchner GmbH & Dept. KG GERMANY - Königsberg www.fraenkische.com

#### **Company Profile:**

Fränkische Rohrwerke is an international, growth oriented and regionally rooted family business in the third generation. The fundament of their success is a 100 years experience and the engagement of employees. Today the company has production and distribution locations in more than 15 countries.

# Fittings, Manufacturer of:

- Press fittings, radial
- Push fit fittings / tool-less fittings

# Pipes, Manufacturer of:

- PE-RT
- PE-Xa
- PE-Xb
- PE-Xb / Al / ...

# Application / Others:

Gas

#### FV - Plast a.s.

CZECH REPUBLIC - Čelákovice www.fvplast.com

#### **Company Profile:**

Czech company FV Plast was established in 1990. It specializes in production of plastic pipes, fittings, valves for pressure distribution of hot and cold tap water, heating and air from materials PP-R, PE-RT, PE-Xa. Production start of the FV THERM PE-RT heating and PE-RT/Al pipes was in September 2014.

#### Fittings, Manufacturer of:

- Press fittings, radial
- Sliding sleeves / press fittings, axial
- Welding, gluing or electrofusions fittings

#### Pipes, Distributor of:

PE-Xa

#### Pipes, Manufacturer of:

- PF
- PE-RT
- PE-RT / Al / ...
- Pipes / PP-R composite fibre
- PP-R
- PP-R Stabi (AI)

# **Application / Others:**

- District/local heating
- Drainage, sanitary sewer
- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

## Geberit AG

Konzernsitz SWITZERLAND - Jona www.geberit.com

#### **Company Profile:**

The globally operating Geberit Group is a European leader in the field of sanitary products. Geberit operates as an integrated group with a very strong local presence in most European countries. The production network encompasses 35 production facilities, of which 6 are located overseas. The Group is headquartered in Rapperswil-Jona, Switzerland.

# Fittings, Manufacturer of:

- Press fittings, radial
- Push fit fittings / tool-less fittings

#### Pipes, Distributor of:

PB

#### Pipes, Manufacturer of:

■ PE-RT / AI / ...

#### Geberit Vertriebs GmbH

GERMANY - Pfullendorf www.geberit.de

#### **Company Profile:**

The globally operating Geberit Group is a European leader in the field of sanitary products. Geberit operates as an integrated group with a very strong local presence in most European countries. The production network encompasses 35 production facilities, of which 6 are located overseas. The Group is headquartered in Rapperswil-Jona, Switzerland.

#### Fittings, Distributor of:

Push fit fittings / tool-less fittings

#### Fittings, Manufacturer of:

• Press fittings, radial

#### Pipes, Distributor of:

- PB
- PE-RT / AI / ...

# General Fittings S.r.l.

ITALY - Gussago (BS) www.generalfittings.it

#### **Company Profile:**

General Fittings Srl was founded in 1981 in Brescia, in one of the most prosperous Italian industrial districts. In 1997 the plant was moved to Gussago in new production site of 11.000 square meters. In the next years the company continued its development not only by further enlargement of its production site but also by the expansion of its production departments.

#### Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Sliding sleeves / press fittings, axial

# Pipes, Distributor of:

- PE-X
- PE-Xb / Al / ...
- PE-Xc / Al / ...

#### **Application / Others:**

- Gas
- Manifolds

## Georg Fischer DEKA GmbH

Division "GF Piping Systems" GERMANY - Dautphetal-Mornshausen www.gfps.com

#### **Company Profile:**

In 1998 DEKA, already active in engineering and manufacturing plastic pipe systems for 50 years, was integrated into the GF Corporation. Over 100 employees manufacture and process the plastic pipes and fittings in a variety of dimensions and materials, such as PP and PVC. DEKA belongs to GF Piping Systems which is one of the three core businesses in the Georg Fischer Corporation.

## Pipes, Manufacturer of:

- PP
- PVC-C

# Georg Fischer JRG AG

Division "GF Piping Systems" SWITZERLAND - Sissach www.jrg.ch

#### **Company Profile:**

GF JRG Company produces hygienic drinking water installation systems, zero static valves made of red brass and solutions for thermal disinfection. The former metal foundry, founded in 1887, is today a high-tech production facility that successfully markets piping systems, such as Sanipex classic, MT, iFIT and INSTAFLEX, under the family brand GF JRG AG, around the world. JRG belongs to GF Piping Systems which is one of the three core businesses in the Georg Fischer Corporation.

## Fittings, Distributor of:

Welding, gluing or electrofusions fittings

#### Fittings, Manufacturer of:

- Compression screw fittings
- Push fit fittings / tool-less fittings
- Sliding sleeves / press fittings, axial

## Pipes, Distributor of:

- PE
- PE-RT / AI / ...
- PE-Xa
- PE-Xc
- PE-Xc / Al / ...

# Application / Others:

Manifolds

# Georg Fischer Pfci Srl

Division "GF Piping Systems" ITALY - Valeggio sul Mincio (VR) www.gfps.com

# Company Profile:

Since 2001 GF Pfci in Valeggio sul Mincio has been one of three development and production facilities located in Italy. Multi layer composite pipes and special brass fittings for water, gas and heating systems in building technology applications are manufactured by about 50 employees at the Italian site in the province of Verona and subsequently shipped throughout the world. Georg Fischer Pfci belongs to GF Piping Systems which is one of the three core businesses in the Georg Fischer Corporation.

# Fittings, Manufacturer of:

- Sliding sleeves / press fittings, axial
- Welding, gluing or electrofusions fittings

#### Pipes, Distributor of:

- Pipes / PP-R composite fibre
- PP-R
- PP-R Stabi (AI)

## Pipes, Manufacturer of:

- PE-RT
- PE-RT / AI / ...
- PE-Xa
- PE-Xc
- PE-Xc / Al / ...

# **Application / Others:**

Gas

# Georg Fischer Piping Systems Ltd.

Division "GF Piping Systems" SWITZERLAND - Schaffhausen www.gfps.com

#### **Company Profile:**

The Schaffhausen production plant is located at the headquarters of the GF Piping Systems Group, founded in 1802. In this plant, which also includes manufacturing of GF Wavin AG and GF Building Services AG, products in diverse plastic materials are fabricated for each of the three business areas: Industry, Utilities and Building Services. Georg Fischer Piping Systems Ltd. belongs to GF Piping Systems which is one of the three core businesses in the Georg Fischer Corporation.

## Fittings, Distributor of:

- Compression screw fittings
- Push fit fittings / tool-less fittings

#### Fittings, Manufacturer of:

- Press fittings, radial
- Welding, gluing or electrofusions fittings

#### Pipes, Distributor of:

- PB
- PE
- PE-RT
- PE-RT / AI / ...
- PE-Xa
- PE-Xc
- PE-Xc / Al / ...
- Pipes / PP-R composite fibre
- PP-R
- PP-R Stabi (AI)

- Control technology and equipment
- Gas
- Manifolds
- Pipe insulation
- Surface heating and cooling components
- Surface heating and cooling, warm water

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# Gerodur MPM Kunststoffverarbeitung GmbH & Co. KG

GERMANY - Neustadt www.gerodur.de

#### **Company Profile:**

As a leading producer in the field of plastic extrusion Gerodur can offer its customers the best possible solutions in excellent quality. Gerodur operates globally. The main focus of its activities is in Germany as well as in Western and Eastern Europe.

# Fittings, Manufacturer of:

Press fittings, radial

#### Pipes, Distributor of:

- PI
- PE

#### Pipes, Manufacturer of:

- PE-RT
- PE-RT / AI / ...
- PE-Xc
- PE-Xc / Al / ...

- Drainage, sanitary sewer
- Fastening technology
- Gas
- Pipefitter's, crimp tools/clamps
- Surface heating and cooling components

# Giacomini S.p.A.

Headquarter

ITALY - San Maurizio d'Opaglio www.giacomini.com

#### **Company Profile:**

Giacomini is acknowledged as its growth as a world leader, especially in the brass product sector with ranges of Lever ball, Gate and Radiator Valves. Founded in 1951 by Alberto Giacomini, the company has expanded to multiple factories producing a wide range of products in metal and plastic.

# Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Push fit fittings / tool-less fittings
- Welding, gluing or electrofusions fittings

# Pipes, Distributor of:

- PE-RT / AI / ...
- PE-Xb / Al / ...

## Pipes, Manufacturer of:

- PB
- PE-RT
- PE-Xb
- PP-R

#### Application / Others:

- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

#### **GIRPI SA**

FRANCE - Harfleur www.girpi.fr

#### **Company Profile:**

GIRPI designs and manufactures fittings and accessories made of synthetic materials for all types of applications, including waste and rainwater drainage, supply and distribution of pressurized hot, cold and chilled water and the distribution of compressed air.

#### Pipes, Distributor of:

- PVC
- PVC-C

# Application / Others:

Drainage, sanitary sewer

# Global Piping Systems S.L. (GPS)

SPAIN - Sentmenat, Barcelona www.ac-fix.com

#### **Company Profile:**

AC-FIX is a well-known brand in the European and American heating and plumbing industry. The brand AC-FIX belongs to Global Piping Systems, S.L. (GPS), an European company founded in 1999 with corporate headquarters in Barcelona, Spain.

# Fittings, Manufacturer of:

- Press fittings, radial
- Sliding sleeves / press fittings, axial

## Pipes, Distributor of:

- PE-Xa
- PE-Xc
- PE-Xc / Al / ...

# **Application / Others:**

- Manifolds
- Pipefitter's, crimp tools/clamps

# Golan Pipe System ApS

DENMARK - Middelfahrt www.golan.dk

#### **Company Profile:**

Golan Pipe System ApS, founded in 1999, produces, markets and sells a unique plumbing concept of pipes, heating systems, and fittings to wholesalers in Scandinavia and Northern Europe. For the past 10 years, the company has been experiencing a strong growth and today employs 35 people. Israeli Golan Plastic Products (GPP) Ltd. was established in 1964. Today they have manufacturing plants in Israel, Chile (Crosspipe Systems S.A), Denmark (Golan Pipe System ApS) and Russia (Golan-Plast OOO).

# Fittings, Distributor of:

- Compression screw fittings
- Push fit fittings / tool-less fittings

## Fittings, Manufacturer of:

• Press fittings, radial

#### Pipes, Distributor of:

- PE-RT / Al / ...
- PE-Xa
- PE-Xc / Al / ...

#### Pipes, Manufacturer of:

PE-RT

- preinsulated pipes
- Surface heating and cooling components

# Greencalor Sistemas, S.L.

SPAIN - Tui (Pontevedra) www.greencalor.com

#### Fittings, Distributor of:

• Press fittings, radial

#### Pipes, Distributor of:

- PE-RT
- PE-RT / Al / ...
- PE-Xb
- Stainless steel

# Application / Others:

- Distributor
- Pipefitter's, crimp tools/clamps
- Surface heating and cooling components
- Surface heating and cooling, warm water

# HakaGerodur AG

SWITZERLAND - Gossau SG www.hakagerodur.ch

#### **Company Profile:**

As leading manufacturer in the field of plastic extrusion HakaGerodur offers its customers best possible solutions in excellent quality. HakaGerodur operates globally. The main focus of its activities is in Switzerland as well as in Western and Eastern Europe.

# Fittings, Distributor of:

Press fittings, radial

#### Pipes, Manufacturer of:

- PB
- PE
- PE-RT
- PE-RT / AI / ...
- PE-Xc
- PE-Xc / Al / ...

- Drainage, sanitary sewer
- Fastening technology
- Gas

#### Harreither GmbH

AUSTRIA - Gaflenz www.harreither.com

#### **Company Profile:**

Harreither is a supplier of complete systems for comfortable living. All products are developed on the basis of scientific standards and are always tested in accordance with various international standards.

#### Pipes, Manufacturer of:

■ PP-R

#### Application / Others:

- Cooling-ceiling: other systems
- Manifolds
- Surface heating and cooling, warm water

# heima GmbH & Co. Hausinstallationen KG

GERMANY - Balingen www.heima-haustechnik.de

# Fittings, Distributor of:

• Press fittings, radial

# Pipes, Distributor of:

■ PE-RT / AI / ...

#### Application / Others:

- Control technology and equipment
- Distributor
- Fastening technology
- Manifolds
- Pipe insulation
- Pipefitter's, crimp tools/clamps
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Heliflex Tubos e Mangueiras, S.A.

PORTUGAL - Gafanha da Encarnação www.heliflex.pt

#### **Company Profile:**

On September 1, 1969, the Heliflex Portuguesa (Tubos Flexíveis), Lda was born (the current Heliflex Tubos e Mangueiras, S.A.). Heliflex has a great experience on the transformation of polymers and a big variety of products.

#### Pipes, Manufacturer of:

■ PP-R

## Heliroma Plásticos, S.A.

PORTUGAL - Albergaria-a-Velha www.heliroma.com.pt

#### **Company Profile:**

Helriroma, founded in 1996, started with the production of HDPE and LDPE pipes. Actually Heliroma is the biggest Iberian manufacturer of PP-R piping systems (20-400mm). Heliroma produces as well PE-RT and PE-Xa pipes being also one of the few Iberian manufacturers of PE-RT/Al/PE-RT multilayer pipes. Amongst others they have CERTIF (Portugal), AENOR (Spain), CSTB (France), DVGW and SKZ (Germany) and Bulgarcontrol (Bulgary) certifications.

#### Fittings, Distributor of:

• Press fittings, radial

#### Fittings, Manufacturer of:

Welding, gluing or electrofusions fittings

#### Pipes, Manufacturer of:

- PE-RT
- PE-RT / AI / ...
- PE-Xa
- Pipes / PP-R composite fibre
- PP-R

#### Application / Others:

• Pipefitter's, crimp tools/clamps

# Henco Industries NV

BELGIUM - Herentals www.henco.be

#### **Company Profile:**

The success of panel radiators in the late 1970s urged Louis Hendrickx to design a panel radiator with a very high heat emission, resulting in the birth of Henrad. He sold Henrad in 1988 and founded Henco Industries in 1992, giving birth to the Henco multi layer pipe.

#### Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Push fit fittings / tool-less fittings

# Pipes, Manufacturer of:

- PE-RT
- PE-Xc
- PE-Xc / Al / ...

- Fastening technology
- Gas
- Manifolds
- Pipefitter's, crimp tools/clamps
- Surface heating and cooling, electrical
- Surface heating and cooling, warm water

# herotec GmbH Flächenheizung

GERMANY - Ahlen www.herotec.de

## Fittings, Distributor of:

Press fittings, radial

#### Pipes, Distributor of:

- PE-RT
- PE-RT / AI / ...
- PE-Xc

### Application / Others:

Control technology and equipment

- Fastening technology
- Manifolds
- Pipe insulation
- Surface heating and cooling components
- Surface heating and cooling, electrical
- Surface heating and cooling, warm water

# **HERZ Armaturen GmbH**

AUSTRIA - Wien www.herz-armaturen.com

#### **Company Profile:**

At present, with approximately 2.400 employees in 24 production facilities worldwide, HERZ-Armaturen Ges.m.b.H. is one of the leading European manufacturers of valves, fittings, circuit regulating valves, dynamic control fittings and thermostatic valves for domestic installations for heating, air conditioning, sanitary and gas appliances.

## Fittings, Manufacturer of:

- Press fittings, radial
- Sliding sleeves / press fittings, axial

#### Pipes, Distributor of:

■ PE-RT / AI / ...

- Manifolds
- Pipefitter's, crimp tools/clamps
- Surface heating and cooling components
- Surface heating and cooling, warm water



IRELAND - Dublin 12 www.hevac.ie

#### **Company Profile:**

The company originally came into being in the sixties as a divisional operation within the JS Lister Group. Following rapid growth, it justified the formation of an independent limited company in 1974 and then, in 1988, came the management buy-out with it's current owners. Our group of companies include three sister companies: Tube Company of Ireland, formed in 1991, Polytherm Ltd, formed in 1999 and Origen Energy Ltd, formed in 2010.

## Fittings, Distributor of:

- Press fittings, radial
- Push fit fittings / tool-less fittings

# Pipes, Distributor of:

■ PE-Xc

## Application / Others:

preinsulated pipes

# **Hewing GmbH**

GERMANY - Ochtrup www.hewing.com

### **Company Profile:**

Hewing GmbH was founded in 1974. In 1988 Hewing was bought by Uponor. In 2012: Uponor sells Hewing GmbH to Rettig ICC. Hewing has market orientated innovations and successful realizations of customer projects thanks to permanent market observation and an open minded dialogue-orientated communication.

#### Pipes, Manufacturer of:

- PE-RT
- PE-RT / AI / ...
- PE-Xc
- PE-Xc / Al / ...

# Application / Others:

- Gas
- OEM Pipe manufacturer
- Surface heating and cooling components

#### Hidronix s.r.l.

ITALY - Brusciano (NA) www.hidronix.com

# Fittings, Distributor of:

Press fittings, radial

#### Pipes, Manufacturer of:

- PE-RT / AI / ...
- PE-Xb / Al / ...

# hp praski GmbH

GERMANY - Hohenkammer hp-praski.de

#### **Company Profile:**

Founded in 1976 the plumbing and heating installation company offers the costumer solutions in the area of floor heating and drinking water systems.

# Fittings, Distributor of:

Press fittings, radial

#### Pipes, Distributor of:

- PE-RT / Al / ...
- PE-Xa

#### Application / Others:

- Snow melting systems, sport grounds heating, road de-icing
- Surface heating and cooling components
- Surface heating and cooling, warm water

# hpg plastics gmbh

GERMANY - Ratingen www.hpg-plastics.com

#### **Company Profile:**

Being a family firm, hpg plastics - now into the 2nd generation - has a continuously growing business since 25 years. hpg's core competence is customer-oriented and customer-specific development and production of plastic pipes and hoses from PE-RT, PEX, PE-Xc and PE up to a diameter of 40 mm.

#### Fittings, Distributor of:

- Press fittings, radial
- Push fit fittings / tool-less fittings

#### Pipes, Manufacturer of:

- PE
- PE-RT
- PE-Xc

# Application / Others:

Surface heating and cooling components

# Hydro-Plast Sp.zo.o.

POLAND - Łazy www.hydroplast.com.pl

#### **Company Profile:**

Hydro-Plast is one of the leading manufacturers of plastic sanitary installations in Europe. It has been offering its products since 1988. In 2007, Hydro-Plast became a part of Aalberts Industry, a Dutch listed Industrial group with production-sites all over the world.

#### Pipes, Manufacturer of:

- Pipes / PP-R composite fibre
- PP-R
- PP-R Stabi (AI)

# Hydroway Srl

ITALY - Brescia www.hydroway.it

#### Fittings, Manufacturer of:

• Press fittings, radial

#### Pipes, Distributor of:

- PE-Xb / Al / ...
- PE-Xc

# Application / Others:

- Surface heating and cooling components
- Surface heating and cooling, warm water

# ibb Modul Air KG

GERMANY - Bad Honnef www.ibb-modul-air.de

# Pipes, Distributor of:

- PE-RT
- PE-RT / AI / ...
- PE-Xc

# Application / Others:

- Fastening technology
- Surface heating and cooling components
- Surface heating and cooling, warm water

# IBP Atcosa S.L.

SPAIN - Cordoba www.atcosa.com

#### Fittings, Distributor of:

- Press fittings, radial
- Push fit fittings / tool-less fittings

# Pipes, Distributor of:

- PE-RT / AI / ...
- PE-Xb

- Manifolds
- Pipefitter's, crimp tools/clamps

#### **IBP GmbH**

GERMANY - Linden www.conexbanninger.com

# Fittings, Distributor of:

- Press fittings, radial
- Push fit fittings / tool-less fittings

# Pipes, Distributor of:

■ PE-RT / Al / ...

# **Application / Others:**

- Manifolds
- Pipefitter's, crimp tools/clamps

# Idrosanitaria Bonomi S.p.A.

ITALY - Lumezzane S.S. (BS) www.idrosanitariabonomi.com

#### **Company Profile:**

Bonomi Idrosanitaria, an internationally recognized company operating in the plumbing and sanitary engineering sector, was set up in 1908 as the result of a hunch of the Bonomi family, with the establishment of a foundry for manufacturing brass items.

#### Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial

#### Pipes, Distributor of:

■ PE-Xb / Al / ...

## Idrotherm 2000 S.r.l.

ITALY - Castelnuovo Garfagnana - Lucca www.idrotherm2000.com

#### **Company Profile:**

Idrotherm 2000 has a well established expertise in the plastics piping field for fluids supply.

#### Pipes, Manufacturer of:

- PE
- PE-RT
- PE-Xb
- PP

- District/local heating
- Drainage, sanitary sewer
- Gas
- Irrigation

# Industrial Blansol S.A.

SPAIN - Ambrosero - Barcena de Cicero (Cantabria) www.blansol.es

#### **Company Profile:**

Industrial Blansol is the leading Spanish manufacturer of PEX and Multi layer pipe systems for sanitary water conduction and heating applications, being one of the European pioneers in the PEX industry and one of the companies with more international presence, exporting their products to more than 50 countries worldwide.

## Fittings, Manufacturer of:

- Press fittings, radial
- Push fit fittings / tool-less fittings
- Sliding sleeves / press fittings, axial

#### Pipes, Manufacturer of:

- PE-RT
- PE-RT / Al / ...
- PE-Xa
- PE-Xb
- PE-Xb / Al / ...

# Inhaus Handels GmbH

Logistikzentrum AUSTRIA - Hohenems www.inhaus.eu

#### Pipes, Distributor of:

- PE-RT
- PE-RT / AI / ...

#### Application / Others:

- Control technology and equipment
- Fastening technology
- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# ISG Sanitär-Handelsgesellschaft mbH & Co. KG

GERMANY - Essen www.isg-aktuell.de

# Pipes, Distributor of:

■ PE / AI / ...

# Application / Others:

Distributor

# Isodomus GmbH

ITALY - Gais (BZ) www.isodomus.com

# Pipes, Distributor of:

- Copper
- PB
- PE-RT
- PE-RT / AI / ...
- PE-Xa
- PE-Xc

## Application / Others:

Control technology and equipment

- Manifolds
- Surface heating and cooling, warm water

# Isoltubex Spain, S.L.

SPAIN - Foyos (Valencia) www.isoltubex.net

# **Company Profile:**

The company was founded in 2002 with the aim of distributing products imported from other countries, products related with plumbing and heating systems, mainly multilayer pipes, PEX and its fittings. In 2007 they took the decision to create a production plant for PE-RT and PE-RT/Al pipes in their installations in Naquera and Foyos (Valencia), this project was executed during 2008.

# Fittings, Distributor of:

- Compression screw fittings
- Press fittings, radial
- Sliding sleeves / press fittings, axial

## Pipes, Distributor of:

- PE-Xa
- PE-Xb / Al / ...

#### Pipes, Manufacturer of:

- PE-RT
- PE-RT / Al / ...
- Pipes / PP-R composite fibre
- PP-R

- Surface heating and cooling components
- Surface heating and cooling, warm water

#### Italsan

SPAIN - Gavà (Barcelona) www.italsan.com

# **Company Profile:**

Italsan was founded at the end of the 80s in Palma de Mallorca, as a company in Spain of Nupi Industrie Italiane with offices in Central America, Chile and Peru. The aim was development and production of piping systems made of PP, PB and PE for plumbing, industrial applications, gas, irriga-tion and heating as an alternative to metallic materials and traditional installation systems. Today, Italsan is a leading manufacturer and distributor of pipe systems in the national and international markets for plumbing and drainage, HVAC and air conditioning.

#### Fittings, Manufacturer of:

 Welding, gluing or electrofusions fittings

## Pipes, Manufacturer of:

- PB
- PE
- Pipes / PP-R composite fibre
- PP-R

# IVAR SpA

ITALY - Prevalle (BS) www.ivar-group.com

# **Company Profile:**

Born in 1985 as focused company for the production of valves, over the year IVAR has concentrated on developing new products. Currently the IVAR Group has branches in 12 countries: AUS, BEL, CHN, FRA, DEU, ITA, NOR, GBR, CZE, SVK, USA, TUN and clients all around the world. IVAR produces items, completly Made in Italy: valves for heating bodies, direct metering modules, heat cost allocators, pipes and fittings, substations for heating systems, distribution manifolds, radiant panel systems, components for solar and geothermal systems.

#### Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Push fit fittings / tool-less fittings

#### Pipes, Distributor of:

- PB
- PE-RT
- PE-RT / AI / ...
- PE-Xa
- PE-Xb
- PE-Xb / Al / ...
- PE-Xc

- Gas
- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# IVT GmbH & Co. KG

GERMANY - Rohr www.ivt-rohr.de

#### **Company Profile:**

More than 100 million connections made by IVT GmbH & Damp; Co. KG guarantee top-quality drinking water, perfectly functioning plumbing and heating systems in numerous buildings all over the world. What was originally a two-man company has since developed into a company employing around 140 people with an annual turnover of about 32 million euros.

## Fittings, Manufacturer of:

 Sliding sleeves / press fittings, axial 

## Pipes, Distributor of:

- PE-RT
- PE-Xc / Al / ...

# Pipes, Manufacturer of:

- PE / Al / ...
- PE-Xb
- PE-Xb / Al / ...

# **Application / Others:**

- Fastening technology
- Manifolds
- preinsulated pipes
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Jäger Sanitär- und Heizungstechnik Systemvertrieb GmbH

AUSTRIA - Hohenems www.jaeger-aquatec.at

#### **Company Profile:**

Jäger aquatec, founded in the 1980th, is a family-run company and one of the leading Austrian system suppliers for plumbing and heating technology as well as underfloor heating systems.

#### Fittings, Distributor of:

• Press fittings, radial

#### Pipes, Distributor of:

- PE-RT
- PP-R

#### **Application / Others:**

Surface heating and cooling, warm water

## Jansen AG

Stahlröhrenwerk, Kunststoffwerk SWITZERLAND - Oberriet SG www.jansen.com

#### **Company Profile:**

Jansen, founded in 1923, today is highly successful in the fields of building systems, solar, steel tubes and plastics — with products that represent Swiss quality, innovation, durability and energy efficiency. The Jansen Group is still a 100% family-owned business and has representatives and business partners all over the world.

#### Pipes, Manufacturer of:

- PB
- PE
- PE / AI / ...
- PE-RT
- PE-RT / AI / ...
- PE-Xb
- PE-Xb / Al / ...
- PP

#### Application / Others:

- Drainage, sanitary sewer
- Gas
- preinsulated pipes

# Jaraflex Vertriebs GmbH

AUSTRIA - Attnang-Puchheim www.jaraflex.at

## Pipes, Distributor of:

- PB
- PE-RT
- PE-RT / AI / ...

## Application / Others:

- Control technology and equipment
- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

#### Jentro NV

BELGIUM - Rotselaar www.jentro.be

# Fittings, Distributor of:

• Press fittings, radial

# Pipes, Distributor of:

- PE-Xa
- PE-Xc / Al / ...

# Application / Others:

■ Pipefitter's, crimp tools/clamps

# JIMTEN SA

SPAIN - Alicante www.jimten.com

## Pipes, Manufacturer of:

■ Pipes / PP-R composite fibre

- PP-R
- PP-R Stabi (AI)

# JK vloerverwarming B.V.

NETHERLANDS - Ede www.jk-de.com

#### Pipes, Distributor of:

- PE-RT
- PE-Xc

# **Application / Others:**

- Control technology and equipment
- Cooling-ceiling: other systems
- Snow melting systems, sport grounds heating, road de-icing
- Surface heating and cooling components
- Surface heating and cooling, electrical
- Surface heating and cooling, warm water

# JOCO Wärme in Form

GERMANY - Willstätt www.joco.de

# Pipes, Distributor of:

- Copper
- PB
- PE-RT / Al / ...

- Surface heating and cooling components
- Surface heating and cooling, warm water

# Kabelwerk Eupen AG

Plastic Pipe Division BELGIUM - Eupen www.eupen.com

#### **Company Profile:**

The pipe factory, which was setup in 1956, is one of Belgium's most important and largest extrusion plants for the production of PVC- and PE-pipes; PVC-C pipes were introduced after 1970 and in 2010 the Pipe Division started to produce PE100-RC pipes.

#### Pipes, Manufacturer of:

- PE
- PVC
- PVC-C

#### Application / Others:

• Drainage, sanitary sewer

# Kalcher GmbH, Horst

AUSTRIA - Klagenfurt www.kalcher.net

#### Pipes, Distributor of:

- PE-RT
- PE-RT / AI / ...
- PE-Xa

- Concrete core activation
- Distributor
- Manifolds
- Surface heating and cooling, warm water



POLAND - Białystok-Kleosin www.kan-therm.com

#### **Company Profile:**

The business activity started in 1990. The group KAN is an experienced producer and supplier of modern solutions and installation systems.

## Fittings, Manufacturer of:

- Press fittings, radial
- Sliding sleeves / press fittings, axial

Welding, gluing or electrofusions fittings

## Pipes, Distributor of:

- PB
- PE-Xc
- PE-Xc / Al / ...

# Pipes, Manufacturer of:

- PE-RT
- PE-RT / AI / ...
- Pipes / PP-R composite fibre
- PP-R
- PP-R Stabi (AI)

# **Application / Others:**

- Manifolds
- Snow melting systems, sport grounds heating, road de-icing
- Surface heating and cooling components
- Surface heating and cooling, warm water

## KAN-therm GmbH

GERMANY - Troisdorf-Spich www.kan-therm.de

#### **Company Profile:**

The group KAN is an experienced producer and supplier of modern solutions and installation systems KAN-therm recognised in Europe. KAN-therm is an optimal, complete installation multisystem for solutions in the scope of pipe water and heating installations.

# Fittings, Manufacturer of:

• Press fittings, radial

# Pipes, Distributor of:

- PB
- PE-RT
- PE-RT / Al / ...
- PE-X / AI / ...
- PE-Xa
- PE-Xc

- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# KE KELIT Kunststoffwerk Gesellschaft m.b.H.

AUSTRIA - Linz www.kekelit.com

## **Company Profile:**

KE KELIT Kunststoffwerk GmbH, a medium-sized company in Linz, Austria, has been involved with the development, pdouction and sales of plastic pipe systems, pipe insulation and pre-insulated pipes. 1945, Karl Egger (I) founds the KE plumbing company "Gas-Water-Heating". Production of KE plastic waste pipes begins 1960.

# Fittings, Distributor of:

Welding, gluing or electrofusions fittings

## Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Push fit fittings / tool-less fittings
- Sliding sleeves / press fittings, axial

# Pipes, Distributor of:

- PB
- PE-RT / AI / ...
- PE-Xa
- PE-Xb / Al / ...
- PP
- PP-R
- Steel

#### Pipes, Manufacturer of:

■ PE-RT

- Compressed air
- Concrete core activation
- Cooling-ceiling: other systems
- District/local heating
- Drainage, sanitary sewer
- Manifolds
- Pipefitter's, crimp tools/clamps
- preinsulated pipes
- Surface heating and cooling, warm water

# Kemmer GmbH

GERMANY - Köln (Lövenich) www.dinotherm.com

# Pipes, Distributor of:

- PE-RT
- PE-Xc
- PE-Xc / Al / ...

# **Application / Others:**

- Control technology and equipment
- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Kermi GmbH

GERMANY - Plattling www.kermi.de

# Pipes, Distributor of:

- PE-RT
- PE-Xc

- Control technology and equipment
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Keul Fussbodenheizung

Estrich - Fußbodenheizung - Baustoffhandel GERMANY - Kemmenau www.keul-fussbodenheizung.de

## Fittings, Distributor of:

• Press fittings, radial

# Pipes, Distributor of:

- PE-RT
- PE-RT / AI / ...

#### Application / Others:

- Control technology and equipment
- Manifolds
- Snow melting systems, sport grounds heating, road de-icing
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Kisan Sp. z o.o.

POLAND - Kańczuga www.kisan.pl

#### **Company Profile:**

In 1991, like in many new companies, the beginnings were very modest. Kisan's biggest capital was the idea to make multilayer pipes. Today Kisan is a leading brand on the market of internal water systems. They are the first Polish manufacturer of complete water supply and heating systems using the technology of multilayer pipes. So in 1991 Kisan's first multilayer pipe production line opened. 1995 the second and 1997 the third. 2002 new PEX-AL-PE 80 pipes were introduced. 2008 new pipe production lines began operation.

# Fittings, Distributor of:

- Compression screw fittings
- Press fittings, radial

#### Pipes, Manufacturer of:

- PE-RT / AI / ...
- PE-Xb / Al / ...

#### **Application / Others:**

Surface heating and cooling, warm water

# KME Germany AG & Co. KG

GERMANY - Osnabrück www.kme.com/de

#### **Company Profile:**

With its 15 production plants in Germany, France, Italy, Spain, China and the USA, KME is one of the world's largest manufacturers of copper and copper alloy products.

# Fittings, Manufacturer of:

• Press fittings, radial

## Pipes, Manufacturer of:

- Copper
- Copper and plastic

# Kométa 2001 Kft.

HUNGARY - Budapest www.kometaszerviz.hu

# Fittings, Distributor of:

Press fittings, radial

## Pipes, Distributor of:

- PE-Xb / Al / ...
- PP-R

# **Application / Others:**

Distributor

# LK Pex AB

SWEDEN - Ulricehamn www.lkpex.se

# **Company Profile:**

The LK group is a technology manufacturer of PE-Xa, PE-RT and corrugated PP pipes, which are suitable for under-floor heating, radiator heating and tap water applications, along with Softpex, which is used in braided connecting pipes. The pipes are sold to the heating and plumbing industry in Europe, the USA and the Middle East.

## Pipes, Distributor of:

■ PE-RT / AI / ...

#### Pipes, Manufacturer of:

- PE-RT
- PE-Xa

- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Maincor Rohrsysteme GmbH & Co. KG

GERMANY - Schweinfurt www.maincor.de

#### **Company Profile:**

After coming out of the insolvency under self-administration of its company Maincor AG (including Maintools and Mainpex) Dieter Pfister, CEO of Maincor, continues with a substantial part of the business by forming the new company Maincor Rohrsysteme & Danuary C. KG on January 1, 2014. It produces plastic pipes and chambers for a wide range of applications.

## Fittings, Manufacturer of:

- Press fittings, radial
- Sliding sleeves / press fittings, axial

## Pipes, Distributor of:

■ PE-Xa

# Pipes, Manufacturer of:

- PE-RT
- PE-RT / AI / ...
- PE-Xc
- PP

## **Application / Others:**

- Corrugated Pipes
- Fastening technology
- Surface heating and cooling, warm water

# Mair Heiztechnik Vertriebsgesellschaft mbH

GERMANY - Vilshofen www.mair-heiztechnik.de

# Fittings, Distributor of:

Push fit fittings / tool-less fittings

## Pipes, Distributor of:

- PE-Xc
- PE-Xc / Al / ...

- Manifolds
- Snow melting systems, sport grounds heating, road de-icing
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Marley Deutschland GmbH

GERMANY - Wunstorf www.marley.de

#### **Company Profile:**

Marley has production sites in Germany and Hungary and is part of the globally active ALIAXIS group. More than 50 years they are producing for the construction and renovation sectors.

## Fittings, Manufacturer of:

- Compression screw fittings
- Push fit fittings / tool-less fittings

# Pipes, Distributor of:

- PB
- PE-Xb / Al / ...
- PE-Xc
- PE-Xc / Al / ...

# Application / Others:

Drainage, sanitary sewer

# MSW Kunststoffe GmbH

GERMANY - Ahlhorn www.msw-online.de

#### **Company Profile:**

MSW Kunststoffe GmbH is manufacturer PE-RT heating pipes, PVC industrial pipes and PE sewage water pipes.

#### Pipes, Manufacturer of:

- PE
- PE-RT
- PVC

# MULTIBETON GmbH Deutschland

GERMANY - Troisdorf www.multibeton.de

## Pipes, Distributor of:

■ PP-R / AI / ...

#### Application / Others:

- Surface heating and cooling components
- Surface heating and cooling, warm water

# Multilayer Pipe Company Spólka z o.o. - MPC

POLAND - Strzelin www.mpc.pl

# **Company Profile:**

Multilayer Pipe Company (MPC) is a Joint Venture between Wavin/NL and TECE/D. It is one of the largest European manufacturers of multi layer pipes and tubes of PEX. The company was founded in 1997 in response to growing market demand for components for modern installation systems.

#### Pipes, Manufacturer of:

- PE-RT
- PE-RT / AI / ...
- PE-Xc
- PE-Xc / Al / ...

# Multitherm Fußboden-Heizungs GesmbH & Co KG

AUSTRIA - Wien www.multitherm.net

#### **Company Profile:**

MULTITHERM, founded in 1979, produces annually more than one million linear meters of PE-RT and PP-R pipes in various dimensions. The various fittings, especially in the pure plastic pipes are also manufactured at partner companies in Austria.

# Fittings, Distributor of:

• Press fittings, radial

#### Pipes, Distributor of:

■ PE-Xc / Al / ...

#### Pipes, Manufacturer of:

- PE-RT
- PP-R

# Application / Others:

- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# MULTITUBO (DW Verbundrohr GmbH)

GERMANY - Haßfurt www.multitubo.de

#### **Company Profile:**

Behind the brand MULTITUBO systems there is a network of companies. This experienced team, founded in 2004, has been able to implement a successful concept into the market in a very short time: 5 Connections - 1 Pipe.

# Fittings, Manufacturer of:

- Press fittings, radial
- Push fit fittings / tool-less fittings
- Welding, gluing or electrofusions fittings

# Pipes, Distributor of:

- PE-RT
- PE-RT / AI / ...

# **Application / Others:**

preinsulated pipes

# Multitubo Montaje y Distribución

SPAIN - Casarrubios del Monte (Toledo) www.multitubo.es

# Fittings, Distributor of:

- Press fittings, radial
- Push fit fittings / tool-less fittings

## Pipes, Distributor of:

- PE-RT / Al / ...
- PE-Xa

# **Application / Others:**

- Manifolds
- preinsulated pipes

# N.T.M. S.p.a.

ITALY - Brandico (BS) www.ntmspa.com

## **Company Profile:**

N.T.M. S.P.A. is a leading Italian manufacturer of fittings for air conditioning, heating and sanitary equipment. Its product range includes brass fittings, collecting lines, ball valves, networked PE tubes and multi layer composite tubes.

# Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Push fit fittings / tool-less fittings

# Pipes, Distributor of:

- PE-Xb
- PE-Xc / Al / ...

# **Application / Others:**

Gas

# NIBCO Sp z o.o.

POLAND - Lodz nibco.com.pl

# **Company Profile:**

NIBCO Sp. z o.o. is a subsidiary of NIBCO INC., which is headquartered in Elkhart, Indiana, USA. It is a leading manufacturer of valves, fittings, and other piping products and was established in 1904. NIBCO Inc. currently manufactures in 12 locations in the United States, Mexico, and Poland. The products are distributed through sales offices in 63 countries.

## Fittings, Distributor of:

- Press fittings, radial
- Push fit fittings / tool-less fittings

# Fittings, Manufacturer of:

Compression screw fittings

# Pipes, Distributor of:

- PE-RT / AI / ...
- PE-Xb / Al / ...

# Pipes, Manufacturer of:

- PVC
- PVC-C

# Application / Others:

Pipefitter's, crimp tools/clamps

# Nothaft Neue HeizSysteme GmbH

GERMANY - Hunding www.nothaft-heiztechnik.de

## Pipes, Distributor of:

■ PE-Xc

#### **Application / Others:**

- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# **NUEVA TERRAIN S.L.**

SPAIN - Vitoria-Gasteiz (Álava) www.nuevaterrain.com

#### Fittings, Distributor of:

Push fit fittings / tool-less fittings

## Fittings, Manufacturer of:

Welding, gluing or electrofusions fittings

## Pipes, Distributor of:

- PB
- PVC

# Nupi Industrie Italiane S.p.A.

ITALY - Busto Arsizio (VA) www.nupiindustrieitaliane.com

#### **Company Profile:**

2008 Nupi and Geco System join forces to create a new big company Nupigeco S.p.A. The headquarters are located in Busto Arsizio near Milan, Italy, while the production and operation centres of Castel Guelfo (PP-R u.a.) and Imola (PE-RT/Al u.a.) are situated in strategic industrial areas near Bologna. 2015 the company changes its name to Nupi Industrie Italiane S.p.A. and offers a full range of pipes and fittings made of the most modern thermoplastic materials.

# Fittings, Manufacturer of:

- Press fittings, radial
- Sliding sleeves / press fittings, axial
- Welding, gluing or electrofusions fittings

## Pipes, Distributor of:

■ PE-Xc / Al / ...

## Pipes, Manufacturer of:

- PB
- PE
- PE-RT / AI / ...
- Pipes / PP-R composite fibre
- PP
- PP-R

# **Application / Others:**

- Drainage, sanitary sewer
- Surface heating and cooling, warm water

#### Nussbaum AG

R.

 ${\sf SWITZERLAND - Olten} \\ {\sf nussbaum.ch} \\$ 

# **Company Profile:**

Nussbaum, founded 1903, produces and distributes valves, installation systems and services for the building services (plumbing and heating).

#### Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Push fit fittings / tool-less fittings

## Pipes, Distributor of:

- PB
- PE-RT
- PE-Xc
- PE-Xc / Al / ...
- Stainless steel
- Steel

# ORKLI, S.COOP

SPAIN - Ordizia, Gipuzkoa www.orkli.es

# Pipes, Distributor of:

PE-Xa

## Application / Others:

- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Oventrop GmbH & Co. KG

GERMANY - Olsberg www.oventrop.de

#### **Company Profile:**

Oventrop is one of the leading European manufacturers of valves and controls for the Building Services Industry.

# Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial

# Pipes, Distributor of:

- PE-RT
- PE-RT / AI / ...
- PE-Xc
- PE-Xc / Al / ...

## Application / Others:

- Control technology and equipment
- Manifolds

# PARTIUM '70 Zrt.

HUNGARY - Debrecen www.partium.hu

# **Company Profile:**

PARTIUM '70 Co has been producing and trading polyethylene and polypropylen products for nearly 40 years. The company was a member of TSZKER Agricultural Cooperatives Trading Network till 1996, when it has changed its name to PARTIUM '70 Co. There are four branches in the company: water,- gas,-and protecting pipe production, PP corrugated sheet production, and wide film production.

# Pipes, Manufacturer of:

- PE
- PP-R
- PVC

# Pegler Yorkshire Group Ltd.

UNITED KINGDOM - Stourton, Leeds, West Yorkshire www.pegleryorkshire.co.uk

#### **Company Profile:**

Pegler Yorkshire is part of the Flow Control division of Aalberts Industries N.V. Its business is in providing innovative product / system solutions to the domestic, commercial, industrial heating, ventilating and plumbing markets world-wide.

# Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Push fit fittings / tool-less fittings

## Pipes, Distributor of:

- PB
- PE-X
- PE-Xc / Al / ...

# Application / Others:

Manifolds

# Pextube - Fábrica de Tubos Plástico-Metálicos, S.A.

PORTUGAL - Travassô www.grupojsa.com

## **Company Profile:**

Grupo JSA: 1. "PerfilTubo - fábrica de tubos e perfis s.a." constituted in 1988 and pioneer in Portugal, produces stainless steel TIG welded tubes. 2. "Pextube - fábrica de tubos plástico-metálicos s.a.", established in 1999, manufactures tubes in plastic materials. 3. "Isoltubex - fábrica de tubos e perfis isolantes Ida", a low density thermal and acoustic insulation PE pipe factory, incorporated in 1994. 4. "Revestube - fábrica de tubos revestidos Ida.", formed in 1999, manufactures of corrugated sleeve. 5. "Compoestor - fábrica de componentes para estores Ida."

# Fittings, Distributor of:

- Compression screw fittings
- Press fittings, radial

#### Pipes, Distributor of:

■ PE-Xb / Al / ...

## Pipes, Manufacturer of:

- PE-RT
- PE-RT / Al / ...
- PE-Xb
- Pipes / PP-R composite fibre
- PP-R
- Stainless steel

- Manifolds
- Pipe insulation
- Pipefitter's, crimp tools/clamps
- preinsulated pipes

# Pipelife Austria GmbH & Co KG

AUSTRIA - Wr. Neudorf www.pipelife.at

## **Company Profile:**

Pipelife Austria was founded in 1989. In 2012 Pipelife was fully taken-over by Wienerberger. Today it is Austria's biggest supplier of plastic pipe systems. Its production, headquarters and management is located in Wien, Austria.

## Fittings, Distributor of:

- Press fittings, radial
- Welding, gluing or electrofusions fittings

# Pipes, Distributor of:

- PB
- PE-RT
- PE-RT / AI / ...
- PE-Xb
- PE-Xc / Al / ...

# Pipes, Manufacturer of:

- PE
- PP
- PP-R
- PVC

- Drainage, sanitary sewer
- Fastening technology
- Fire prevention
- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water



CZECH REPUBLIC - Otrokovice www.pipelife.cz

#### **Company Profile:**

Pipelife Czech was founded in April 1994 as a joint venture company Pipelife and Fatra Inc. Napajedla. It is the largest Czech producer and seller of plastic piping systems made of PVC, PE and PP.

# Fittings, Distributor of:

Press fittings, radial

## Fittings, Manufacturer of:

Welding, gluing or electrofusions fittings

# Pipes, Distributor of:

- PE-RT / AI / ...
- PE-Xc / Al / ...

# Pipes, Manufacturer of:

- PF
- Pipes / PP-R composite fibre
- PP
- PP-R
- PP-R Stabi (AI)
- PVC

# **Application / Others:**

Drainage, sanitary sewer

# Pipelife Hungária Műanyagipari Kft.

HUNGARY - Debrecen www.pipelife.hu

# **Company Profile:**

PIPELIFE HUNGARIA Muanyagipari Korlatolt Felelossegu Tarsasag was founded in 1990. This company is working within the Unlaminated Plastics Film and Sheet (except Packaging) Manufacturing industry. Pipelife is one of the world's leading suppliers of plastic pipe systems, currently present in 27 countries. It manufactures and markets a wide range of quality pipe systems.

# Fittings, Distributor of:

• Press fittings, radial

## Pipes, Manufacturer of:

- PE
- PE-RT
- PE-RT / Al / ...
- PE-Xb / Al / ...
- PP-R
- PVC

## **Application / Others:**

Surface heating and cooling, warm water

# **Pipelife Ireland Limited**

IRELAND - White s Cross, Cork www.pipelife.ie

## **Company Profile:**

Pipelife Irland (formerly Quality Plastics Ltd (QPL)) has been in the business of producing quality goods for the Plumbing, Construction and Agricultural sectors since 1970, specialising in the extrusion of polyethylene pipe.

## Fittings, Distributor of:

- Press fittings, radial
- Push fit fittings / tool-less fittings

## Pipes, Distributor of:

- PE-RT
- PE-Xb / Al / ...

#### Pipes, Manufacturer of:

- PB
- PE-Xb

# Application / Others:

• Drainage, sanitary sewer

# Pipetec GmbH

GERMANY - Bisingen pipetec-deutschland.de

## Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Push fit fittings / tool-less fittings

# Pipes, Distributor of:

■ PE-RT / AI / ...

# Pipetech Italia Srl

ITALY - Pescara www.pipetechitalia.com/eng/index.asp

# Company Profile:

The Pipetech Italia Srl company was founded in August 2007. Today Pipetech Italia Srl is leader in the supply of thermo-hydraulic solutions. The company offers a high – level range of products, according to ISO9002. The company manages all the researches, development, production and marketing activities.

#### Pipes, Manufacturer of:

■ PP-R

# Pipex - Auray Managing S.L.

SPAIN - Palau Solità - Barcelona www.pipex.es

#### **Company Profile:**

Pipex - Auray Managing S.L. (formerly: Pipex Systems SA) is one of the leading manufacturer of plastic pipes for heating and sanitary applications companies. It is a private company with a long business experience in the world of pipe extrusion, who started its project in 1996 with a constant vocation of innovation in markets. Often they are producing OEM products, according the specifications and needs of their clients.

## Pipes, Manufacturer of:

- PE-RT
- PE-RT / AI / ...
- PE-Xa

# Application / Others:

• OEM Pipe manufacturer

# Plastica Alfa S.p.A

ITALY - Caltagirone (CT) www.plasticalfa.com

# **Company Profile:**

1975-1983 the "Studio Alfa Irrigazione" was established; soon evolves in Plastica Alfa S.r.l. a manufacturing company of pipe fittings. 1989-1990 the company started with the production of PP-R pipes and fittings under the Brand name ALFAIDRO SYSTEM. 2002 Plastica Alfa acquired a PE, PP-R and spiral pipe company. 2008 started the production of MULTYPEXALFA and in 2013 Alfaidro Faser PP-R system with the latest development No Fire PP-RCT pipe system.

#### Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Welding, gluing or electrofusions fittings

#### Pipes, Manufacturer of:

- PE
- PE-Xb / Al / ...
- Pipes / PP-R composite fibre
- PP-R
- PP-R Stabi (AI)

- Drainage, sanitary sewer
- Gas
- Irrigation
- Manifolds

# Plásticos Ferro, S.L. - Ferroplast

Grupo Plásticos Ferro (GPF)
SPAIN - Muras (Lugo)
www.ferroplast.es

#### **Company Profile:**

A pioneering company in the manufacture of plastic pipes and fittings, marketing other products in order to offer its customers complete solutions and systems. Its prestigious FERROPLAST brand is highly renowned in the market. The head office of the Grupo Plásticos Ferro (GPF) is in La Coruna in Spain. The FERROPLAST factories are located in Spain in Muras (Lugo) and Atarfe (Granada) as well as in Morocco in Casablanca. GPF member Braseli Tubos with production facility in Spain in Lantaron (Alava) produces the PEX and PE-RT/Al pipes.

# Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Sliding sleeves / press fittings, axial

#### Pipes, Distributor of:

- PE-RT / AI / ...
- PE-Xa
- PE-Xb

## Pipes, Manufacturer of:

- PE
- PVC

# **Application / Others:**

- Adhesive
- Drainage, sanitary sewer
- Gas
- Manifolds
- Pipefitter's, crimp tools/clamps
- Surface heating and cooling components
- Surface heating and cooling, warm water

# POLOPLAST GmbH & Co. KG

AUSTRIA - Leonding www.poloplast.com

#### **Company Profile:**

POLOPLAST is specialised in the production of high-performance, long-lasting and recyclable pipe systems with elevated levels of innovation. The company belongs to the leading manufacturers of high-grade plastic pipe systems using multilayer technology. In its two business locations in Leonding, Austria and Ebenhofen, Germany, POLOPLAST has meanwhile created 367 jobs (31.12.2015). In 2015 the company reported consolidated revenues of 103 94 Mio € (94 Mio € in 2014 and 33 Mio € in 2000). The production capacity is about 20.000 tons.

# Pipes, Manufacturer of:

- Pipes / PP-R composite fibre
- PP-R

- Drainage, sanitary sewer
- Fastening technology
- Fire prevention

# Polypipe Building Products Ltd.

UNITED KINGDOM - Edlington, Doncaster www.polypipe.com

## **Company Profile:**

Polypipe Building Products is a leading UK manufacturer of above and below ground drainage products and plastic plumbing as well as underfloor heating systems.

# Fittings, Manufacturer of:

- Press fittings, radial
- Push fit fittings / tool-less fittings

# Pipes, Manufacturer of:

PB

## Application / Others:

- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Polysan Handesgesellschaft m.b.H. & Co KG

AUSTRIA - Krems www.polysan.at

# Fittings, Distributor of:

- Press fittings, radial
- Push fit fittings / tool-less fittings

## Pipes, Distributor of:

- PE-RT
- PE-RT / AI / ...
- PE-X
- PE-Xc / Al / ...
- Stainless steel
- Steel

- Distributor
- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Polytherm Española S.A.

SPAIN - San Sebastián de los Reyes (Madrid) www.polytherm.es

## Fittings, Distributor of:

Press fittings, radial

## Pipes, Distributor of:

- PE-RT
- PE-X
- PE-X / Al / ...
- PE-Xb

## Application / Others:

- District/local heating
- Manifolds
- preinsulated pipes
- Snow melting systems, sport grounds heating, road de-icing
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Polytherm Heating Systems Ltd

IRELAND - Dublin 12 www.polytherm.ie

## **Company Profile:**

Formed in 1999, Polytherm Heating systems was built on the success of the underfloor heating division of parent company Hevac Ltd., and since its formation has provided a wide range of solutions for underfloor heating in residential, commercial & industrial use.

# Pipes, Distributor of:

- PE / AI / ...
- PE-X / Al / ...
- PE-Xc

- preinsulated pipes
- Surface heating and cooling, warm water

# Prandelli Polska Sp. z o.o.

POLAND - Gdańsk www.coprax.pl

# Fittings, Distributor of:

- Compression screw fittings
- Press fittings, radial
- Welding, gluing or electrofusions fittings

## Pipes, Distributor of:

- PE-RT / AI / ...
- PE-Xb
- PE-Xb / Al / ...
- PE-Xc
- PP-R

## **Application / Others:**

- Distributor
- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Prandelli S.p.A.

ITALY - Lumezzane S.S. (BS) www.prandelli.com

#### **Company Profile:**

Prandelli was founded in 1899. The production range currently consists of three pipes and fittings systems in plastic and metallic material.

# Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Welding, gluing or electrofusions fittings

# Pipes, Manufacturer of:

- PE-RT / AI / ...
- PE-Xb
- PE-Xb / Al / ...
- PP-R

## **Application / Others:**

Surface heating and cooling, warm water

# PRAWTECH Sp. z o.o.

POLAND - Wolbrom www.prawtech.pl

# **Company Profile:**

The Polish company PRAWTECH for over 20 years has been gaining experience in the design and manufacture of high-quality pipes and fittings made from PP-R. By participating actively in the development of the heating industry in Poland and in the world they created a department to promote the use of Renewable Energy Sources (RES). The offer is dedicated to modern technologies dynam-ically developing section for geothermal ground source heat pumps. Using its extensive manufactur-ing facilities they produce the highest quality geothermal probes, chambers and multi-section mani-folds.

# Fittings, Manufacturer of:

 Welding, gluing or electrofusions fittings

# Pipes, Manufacturer of:

- Pipes / PP-R composite fibre
- PP-R
- PP-R Stabi (AI)

# R.B.M. spa

Componenti per Impianti Idrotermici ITALY - Nave (BS) www.rbm.eu

# **Company Profile:**

Founded in 1953 by the Bossini family, RBM is now an international leader in the heating and plumbing industry.

#### Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial

# Pipes, Distributor of:

■ PE-Xa

#### Pipes, Manufacturer of:

- PE-RT
- PE-RT / AI / ...
- PE-Xc
- PE-Xc / Al / ...

- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

## rabo-Heiztechnik

GERMANY - Zeil am Main www.heizungdirekt24.de

## Fittings, Distributor of:

Press fittings, radial

#### Pipes, Distributor of:

- PE-RT
- PE-RT / AI / ...

## Application / Others:

• Control technology and equipment

- Manifolds
- Pipe insulation
- Surface heating and cooling components
- Surface heating and cooling, warm water

# ratiodämm Produktionsgesellschaft mbH

GERMANY - Neustadt/Wied www.ratiodaemm.de

## **Company Profile:**

Wir verstehen uns als Dienstleister, der auf die individualisierte Plattenkaschierung, Heizrohrfertigung sowie der Produktion von Zubehören und Kunststoffformteilen im Bereich der OEM-Vermarktung spezialisiert ist. Wir liefern an Systemanbieter aus der Sanitär- und Heizungsbranche sowie an den qualifizierten Fachhandel.

#### Pipes, Distributor of:

- PB
- PE-RT
- PE-RT / AI / ...
- PE-Xa
- PE-Xc

# **Application / Others:**

- Surface heating and cooling components
- Surface heating and cooling, warm water

# RDZ S.p.A.

ITALY - SACILE (PN) www.rdz.it

# Pipes, Distributor of:

■ PE-Xc

- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Reboca, S.L.

SPAIN - L'Ollería (Valencia-España) www.repolen.com

## **Company Profile:**

When Reboca, S.L. was founded in 1981, its main business was reclaiming and recycling plastics. After a time the company began to diversify into the drip irrigation tubing and accessories market and in 1985 Reboca started to manufacture high-pressure water pipes.

## Pipes, Manufacturer of:

- PE
- PE-RT
- PP-R

# Application / Others:

- Drainage, sanitary sewer
- Irrigation

# REDI s.p.a.

ITALY - Zola Predosa (BO) www.redi.it

## **Company Profile:**

REDI has been producing PVC fittings for over 50 years, becoming a highly advanced and successful company. The company was founded in 1962 and is based in Bologna, Italy. REDI SpA (including Dalpex SpA (= multi layer pipe production) since 2014) operates as a subsidiary of Aliaxis S.A.

## Fittings, Distributor of:

• Press fittings, radial

# Pipes, Manufacturer of:

- PE-Xb / Al / ...
- PVC

- Drainage, sanitary sewer
- Surface heating and cooling, warm water

# REHAU AG + Co

GERMANY - Rehau www.rehau.de

#### **Company Profile:**

Since their founding in 1948, REHAU has grown through their own initiative to a worldwide operation. During the first decade, REHAU successfully established their business in Germany and Austria. This was followed by expansion throughout Europe, North America, South America, Africa, Asia and Australia. During the past 10 years, they have developed a strong presence in Eastern Europe. REHAU is a leading systems and service provider for polymer-based solutions in construction, automotive and industry. The REHAU Group headquarters is located in Muri, Switzerland.

# Fittings, Manufacturer of:

- Press fittings, radial
- Sliding sleeves / press fittings, axial
- Welding, gluing or electrofusions fittings

# Pipes, Distributor of:

■ PE-Xc / Al / ...

# Pipes, Manufacturer of:

- PE-Xa
- PE-Xa / Al / ...

## **Application / Others:**

- Concrete core activation
- Control technology and equipment
- Cooling-ceiling: other systems
- District/local heating
- Drainage, sanitary sewer
- Fastening technology
- Gas
- Manifolds
- preinsulated pipes
- Snow melting systems, sport grounds heating, road de-icing
- Surface heating and cooling components
- Surface heating and cooling, warm water

# **REHAU SA**

FRANCE - Morhange Cedex www.rehau.fr

#### **Company Profile:**

REHAU SA only produces PE-Xa pipes mainly for the french market. The main product is RAUTHERM PE-Xa pipe which is well established there.

# Pipes, Manufacturer of:

PE-Xa

# Reliance Worldwide Corporation (Europe) S.L.

SPAIN - Moraleda de Zafayona, Granada www.rwc.com/eu

#### **Company Profile:**

Reliance is a leader in the design, manufacture and supply of premium branded, high quality water flow and control products and solutions for the plumbing industry. From a small manufacturing operation in Australia, Reliance has grown to become a global business with operations in the USA, Australia, the UK, Canada, New Zealand and Spain. RWC establishes its European headquarter in Spain in late 2016. The Spanish PE-Xa facilities have been formerly IPS-PLOMYPLAS.

#### Fittings, Manufacturer of:

- Press fittings, radial
- Push fit fittings / tool-less fittings

# Pipes, Manufacturer of:

- PF-RT
- PE-Xa

# Rettig Austria GmbH

VOGEL&NOOT

AUSTRIA - Wartberg www.vogelundnoot.com

#### **Company Profile:**

VOGEL&NOOT is Europe's leading technology partner. The company sets technical standards and its broad product portfolio encompasses the fields of radiators, underfloor heating and chimneys.

#### Pipes, Distributor of:

- PE-RT
- PE-RT / AI / ...
- PE-Xa
- PE-Xc

## Application / Others:

- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Rettig Belgium NV RADSON

BELGIUM - Zonhoven www.radson.com

#### **Company Profile:**

A family firm founded in 1966, Radson has today become one of Europe's premier radiator manufacturers. Since 1990, the Zonhoven company has been part of the Rettig ICC Group, a Finnish multinational, and now has subsidiaries in France and Poland. Every day, the Belgian production unit makes around 7000 to 10000 radiators.

# Pipes, Distributor of:

- PE-RT
- PE-Xa

- Surface heating and cooling components
- Surface heating and cooling, warm water

# Rettig Germany GmbH

**PURMO** 

GERMANY - Vienenburg www.purmo.com

#### **Company Profile:**

PURMO is part of the Rettig ICC Group, one of the world's largest radiator manufacturers. PURMO has twelve factories throughout Europe, and the largest is based in Rybnic, Poland.

# Pipes, Distributor of:

- PE-RT / AI / ...
- PE-Xa
- PE-Xc

# **Application / Others:**

Control technology and equipment

- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# **Rettig Heating Group France**

FINIMÉTAL

FRANCE - Le Blanc-Mesnil Cedex www.finimetal.fr

#### **Company Profile:**

Depuis plus de 50 ans, la société FINIMETAL est spécialisée dans la conception, la production et la commercialisation de radiateurs et compte aujourd'hui plus de 40 millions de radiateurs FINIMETAL posés à ce jour. Finimétal, Vogel & Noot et Myson, trois des marques leaders du groupe RETTIG adoptent une nouvelle identité visuelle commune et réunissent également leurs savoir-faire et compétences pour créer une unité pan-européenne, leader incontesté dans les systèmes de chauffage (radiateurs sèche-serviettes, décoratifs, colonnes, panneaux ou plissés ainsi que plancher chauffant).

# Pipes, Distributor of:

PE-Xc

## Application / Others:

- Control technology and equipment
- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

## Rettig ICC by

Head office West & Central Europe NETHERLANDS - Maastricht-Airport www.rettigicc.com

#### **Company Profile:**

Rettig ICC (Indoor Climate Comfort) brings together Europe's leading brands for radiators, underfloor heating, valves and controls. The Company runs international businesses with customers located in over 50 countries around the globe. The products are manufactured in 15 plants located in 11 different countries.

## Pipes, Distributor of:

- PE-RT
- PE-RT / Al / ...
- PE-Xa
- PE-Xc

- Surface heating and cooling components
- Surface heating and cooling, warm water

## Revel, s.r.o.

CZECH REPUBLIC - Příbram www.revel-pex.com

## **Company Profile:**

REVEL, a purely Czech company, which is on the market since 1993 (registered 94), manufactures and supplies the installation system with pipes made from PEX. Since 1998, the firm has its own production line and is the only domestic manufacturer of PEX pipes.

## Fittings, Distributor of:

- Compression screw fittings
- Press fittings, radial

# Pipes, Distributor of:

■ PE-Xb / Al / ...

# Pipes, Manufacturer of:

PE-Xb

# Application / Others:

Surface heating and cooling, warm water

#### REVI d.o.o

SLOVENIA - Limbus-Pekre www.revi.si

# **Company Profile:**

The Slovenian based company with its headquarters near Maribor was established in 1963. Revi is producer of equipment for installations for heating, cooling and water. Revi has developed the fitting system for piping made of PPSU.

## Fittings, Manufacturer of:

 Sliding sleeves / press fittings, axial

## Pipes, Distributor of:

- PE-RT
- PE-RT / AI / ...

## Application / Others:

Surface heating and cooling, warm water

# Riegelhof & Gärtner GmbH

RUG Deutschland GERMANY - Weiterstadt

## Pipes, Distributor of:

PVC-C

# Rimatherm GmbH

GERMANY - Apen-Augustfehn www.rimatherm.com

#### Pipes, Distributor of:

PE-RT

## Application / Others:

- Manifolds
- Surface heating and cooling, warm water

# Rinaldi & Pettinaroli srl

ITALY - Gozzano (NO) www.rinaldiepettinaroli.com

#### **Company Profile:**

Rinaldi & Pettinaroli was established in 1970 thanks to its founder Giuseppe Pettinaroli. The company manufactures and distributes yellow and chromed brass fittings for water and gas systems.

# Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial

## Pipes, Distributor of:

■ PE-Xb / Al / ...

# Rofix Sp. z o.o.

POLAND - Strzelce Krajeńskie www.rofix.pl

# **Company Profile:**

Rofix NV, founded in in Belgium in 1978, become the premier specialist in radiator installation and installation fittings with international presence. The production sites are located in Belgium, China and Poland. With the new factory in Poland, Rofix started producing multilayer pipes in June 2007.

## Fittings, Distributor of:

Press fittings, radial

## Pipes, Distributor of:

■ PE-RT / AI / ...

#### Application / Others:

Fastening technology

# Roth Nordic A/S

DENMARK - Frederikssund www.roth-nordic.dk

# Fittings, Distributor of:

Push fit fittings / tool-less fittings

# Pipes, Distributor of:

- PE-RT / AI / ...
- PE-Xc

## Roth Werke GmbH

GERMANY - Dautphetal-Buchenau www.roth-werke.de

#### **Company Profile:**

Roth was founded in 1947. The company is a multinational manufacturer of energy and sanitary systems. Roth delivers established brand products to the market through a three-tier sales channel.

## Fittings, Manufacturer of:

Press fittings, radial

#### Pipes, Distributor of:

- PE-RT / AI / ...
- PE-Xc

#### Pipes, Manufacturer of:

■ PE-RT

# Application / Others:

- Concrete core activation
- Control technology and equipment
- Cooling-ceiling: other systems
- Fastening technology
- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Rubinetterie Bresciane Bonomi S.p.A.

ITALY - Lumezzane (BS) www.rubinetteriebresciane.it

# Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Push fit fittings / tool-less fittings

## Pipes, Distributor of:

- PE-RT / AI / ...
- PE-Xb / Al / ...
- PE-Xc / Al / ...

# RWC - Reliance Worldwide Corp. (UK) Ltd.

(formerly: John Guest Ltd.)
UNITED KINGDOM - West Drayton
www.johnguest.com

#### **Company Profile:**

The first John Guest company was formed in the early 1960´s specializing in precision engineer-ing and tool making. In 1974, John Guest developed his first push in tube connector for use with compressed air. The basic "Super Speedfit" concept has been developed to include fittings for a wide range of applications. Today ten worldwide sales and distribution companies support a network of stockists and distributors in over 50 countries.

# Fittings, Manufacturer of:

Push fit fittings / tool-less fittings

# Pipes, Manufacturer of:

- PB
- PE-RT
- PE-Xb

## **Application / Others:**

- Control technology and equipment
- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# S.A.S Noyon & Thiebault

FRANCE - Vaudricourt www.noyon-thiebault.fr

# Fittings, Distributor of:

Press fittings, radial

# Pipes, Distributor of:

- PE-X
- PE-Xc / Al / ...

# **Application / Others:**

Manifolds

# SA.MI Plastic S.p.A.

ITALY - Sestino (AR) www.tubi.net/en/companies/sa-mi-plastic

## **Company Profile:**

SA.MI plastic has a wide range of products that complements those of the other companies within the System Group (LDPE, HDPE water, irrigation, gas, drainage and sewerage pipes). They are producing PE-Xb/Al multi layer pipes.

# Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial

# Pipes, Distributor of:

PE-Xc

#### Pipes, Manufacturer of:

- PE
- PE-Xb / Al / ...

#### Application / Others:

- Gas
- Manifolds
- Pipefitter's, crimp tools/clamps
- preinsulated pipes
- Surface heating and cooling components

# SANHA GmbH & Co. KG

GERMANY - Essen www.sanha.com

## **Company Profile:**

The company was founded under the name of SANHA Kaimer by Marianne and Friedhelm Kaimer in 1964. The SANHA group is one of the leading European manufacturers of pipe systems for drinking water, gas, solar, heating, cooling and sanitary applications for use in domestic and industrial settings.

## Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Push fit fittings / tool-less fittings

# Pipes, Distributor of:

- PE-RT / AI / ...
- PE-Xc
- Steel

## Pipes, Manufacturer of:

- Copper
- Stainless steel

## **Application / Others:**

Surface heating and cooling, warm water

# SANITAS spol. s r.o.

SLOVAKIA - Myjava www.sanitassk.eu

# Pipes, Manufacturer of:

■ Pipes / PP-R composite fibre

- PP-R
- PP-R Stabi (AI)

# Sanitop-Wingenroth GmbH & Co. KG

GERMANY - Warendorf www.sanitop-wingenroth.de

# Pipes, Distributor of:

■ PE-RT / AI / ...

# **Application / Others:**

Distributor

# SATEC SK, a.s.

SLOVAKIA - Nitra www.satec.sk

# Fittings, Distributor of:

• Press fittings, radial

# Pipes, Distributor of:

- PE-Xa / Al / ...
- Pipes / PP-R composite fibre
- PP-R
- PVC

# **Application / Others:**

Distributor

# SCHÜTZ GmbH & Co. KGaA

GERMANY - Selters www.schuetz.net

# **Company Profile:**

The SCHÜTZ Group has been developing and producing market-driven and customer-driven, innovative products made of plastic and metal since 1958.

# Pipes, Distributor of:

- PE / AI / ...
- PE-RT / AI / ...
- PE-Xc

# Pipes, Manufacturer of:

- PE-RT
- PE-Xa

## **Application / Others:**

- Control technology and equipment
- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

## Sckema Srl

ITALY - Farra di Soligo (TV)

# Pipes, Distributor of:

■ PE-Xc

# Seppelfricke Armaturen GmbH

GERMANY - Gelsenkirchen www.seppelfricke.de

# Fittings, Distributor of:

- Press fittings, radial
- Push fit fittings / tool-less fittings
- Welding, gluing or electrofusions fittings

## Pipes, Distributor of:

■ PE-Xc / Al / ...

# Application / Others:

• Pipefitter's, crimp tools/clamps

# Seppelfricke SD Sistemi

Italia surl ITALY - Susegana (TV) www.seppelfricke.it

# Pipes, Distributor of:

- PE
- PE-Xc
- PE-Xc / Al / ...

## **Application / Others:**

- Surface heating and cooling components
- Surface heating and cooling, warm water

# SESTA S.r.I.

ITALY - Benevento (BN) www.sestasrl.it

#### **Company Profile:**

In 2005 SESTA began, in the establishment of Benevento, with the production of PE-Xb/Al/PE-Xb pipes.

## Fittings, Distributor of:

• Press fittings, radial

## Pipes, Manufacturer of:

- PE-RT / AI / ...
- PE-Xb / Al / ...

# **Application / Others:**

Gas

# SHT Haustechnik AG

Großhandel für Sanitär-, Heizungs- und Installationstechnik AUSTRIA - Wien www.sht-gruppe.at

# Fittings, Distributor of:

Press fittings, radial

# Pipes, Distributor of:

- PE-RT / AI / ...
- PP-R

# **Application / Others:**

Distributor

# SiGMA-Li Sp. Jawna Wiejacha

POLAND - Goleszów www.sigmali.pl

# **Company Profile:**

SiGMA-Li Sp. Jawna Wiejacha, as one of the first companies in Poland, launched the production of a complete PP-R installation system. In 2013, in response to the rapidly growing market of new technologies in the field of central heating, they expanded their offer of a complete surface and radiator central heating system called SiGMA-Li Premium with PE-RT/Al pipes. Since 2015 they started own production of these pipes on a battenfeld-cincinnati line.

## Fittings, Manufacturer of:

 Welding, gluing or electrofusions fittings

## Pipes, Manufacturer of:

- PE-RT / AI / ...
- Pipes / PP-R composite fibre
- PP-R
- PP-R Stabi (AI)

# Application / Others:

Manifolds

# **SLOVPLAST** Myjava a.s

SLOVAKIA - Myjava www.slovplastmyjava.sk

# Pipes, Distributor of:

PE-X

## Pipes, Manufacturer of:

- PP-R
- PP-R Stabi (AI)

## Somatherm SA

FRANCE - Périgueux Cedex 9 www.somatherm.fr

# Fittings, Distributor of:

• Press fittings, radial

# Pipes, Distributor of:

- PE-Xb
- PE-Xc / Al / ...

# **Application / Others:**

- Manifolds
- Surface heating and cooling components

## Sortita S.r.l.

ITALY - Susegana (TV)

## Pipes, Distributor of:

■ PE-Xc / Al / ...

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# SST-Rolltec System Technik S.r.l.

ITALY - Trevignano (TV) www.sst-rolltec.it

# Fittings, Distributor of:

Press fittings, radial

# Pipes, Distributor of:

- PE-X
- PE-Xc
- PE-Xc / Al / ...

# **Application / Others:**

- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Standard Hidráulica, S.A.U.

Poligono Industrial la Ferrería SPAIN - Montcada i Reixac (Barcelona) www.standardhidraulica.com

# Fittings, Distributor of:

Press fittings, radial

# Pipes, Distributor of:

- PB
- PE-RT / AI / ...
- PE-X
- PE-X / AI / ...

# **Application / Others:**

Surface heating and cooling, warm water

# Steil Systemtechnik GmbH

GERMANY - Gerolstein www.steil-gmbh.de

#### Fittings, Distributor of:

Press fittings, radial

#### Pipes, Distributor of:

- PB
- PE-RT
- PE-RT / AI / ...
- PE-Xc

#### Application / Others:

- Pipe insulation
- Surface heating and cooling components
- Surface heating and cooling, warm water

# SYSTERM S.p.A.

ITALY - Bellusco (MI) www.systerm.it

#### **Company Profile:**

SYSTERM started its activity in 1992 in hydrothermal field with exclusive distribution of multilayer pipe WELCO-Flex and WELCO-Teck, cross-linked Polyethylene Tubing WELCO-Pex (tubes produced by the German company Hewing) and with the production of its brass fittings. First company in Italy to produce fittings crimped WOPREX (1994) for multilayer pipe, gets then, in 1997, the prestigious certification by the German DVGW (Deutsher Varien des Gas-und Wasserfaches and v.), then complete the distribution of multilayer pipe with a wide and complete range of fittings and with all the necessary accessories to distribution systems.

#### Fittings, Distributor of:

Press fittings, radial

#### Pipes, Distributor of:

■ PE-Xc / Al / ...

#### Application / Others:

- Manifolds
- Surface heating and cooling components

#### Te-sa S.r.l.

ITALY - Borgomanero (NO) www.te-sa.com

#### **Company Profile:**

Located in Borgomanero, an entrepreneurial city in the province of Novara and a manufacturing hub in the plumbing, heating and sanitary fittings sector both in Italy and worldwide, the company occupies a large facility organised according to modern functional standards into three seamlessly integrated macro areas (administration, design and logistics-production) that reflect the TE-SA concept of efficiency.

## Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial

#### Pipes, Distributor of:

■ PE-RT / AI / ...

## Application / Others:

Manifolds

## **TECE GmbH**

GERMANY - Emsdetten www.tece.com

#### **Company Profile:**

TECE, founded in 1955, is a mid-size, family-managed company. TECE manufactures and sells its domestic engineering solutions across Germany and the world on the basis of long-term customer relationships.

#### Fittings, Manufacturer of:

- Push fit fittings / tool-less fittings
- Sliding sleeves / press fittings, axial

#### Pipes, Distributor of:

- PE-RT
- PE-RT / Al / ...
- PE-Xc
- PE-Xc / Al / ...

# **Application / Others:**

- Pipefitter's, crimp tools/clamps
- Surface heating and cooling, warm water

# Tecno Hidro Rapid - THR

ITALY - Carnago (VA) www.thrapid.com

# Pipes, Distributor of:

- PB
- PE-X

# **Application / Others:**

- Surface heating and cooling components
- Surface heating and cooling, warm water

#### Terrendis NV

BELGIUM - Desteldonk www.terrendis.com

#### **Company Profile:**

Terrendis is a new Belgian subsidiary of the French RYB Group since January 2015 fully dedicated to manufacturing and marketing a comprehensive range of pre-insulated plastic piping systems.

# Pipes, Manufacturer of:

- PE
- PE-RT

## **Application / Others:**

preinsulated pipes

# Thermaflex Isolatie by

NETHERLANDS - Waalwijk www.thermaflex.com

#### **Company Profile:**

Thermaflex was founded in the Netherlands in 1976. Thermaflex introduced pre-insulated pipes in 2001 and now covers both as a true technology leader.

#### Pipes, Manufacturer of:

PB

#### Application / Others:

- District/local heating
- Pipe insulation
- preinsulated pipes

#### Therminon BV

NETHERLANDS - Bladel www.therminon.nl

#### Pipes, Distributor of:

- PE-RT
- PE-RT / AI / ...
- PE-Xc / Al / ...

# Application / Others:

- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Thermoduct NV

BELGIUM - Mortsel www.thermoduct.be

#### Pipes, Distributor of:

■ PE-Xa

- Surface heating and cooling components
- Surface heating and cooling, electrical
- Surface heating and cooling, warm water

# THERMOLUTZ GmbH & Co.

Heizungstechnik KG GERMANY - Reutlingen www.thermolutz.de

# Pipes, Distributor of:

- PB
- PE-RT
- PE-RT / Al / ...

# **Application / Others:**

- Concrete core activation
- Surface heating and cooling components
- Surface heating and cooling, electrical
- Surface heating and cooling, warm water

# Thermotech Scandinavia AB

Thermotech Product department SWEDEN - Sollefteå www.thermotech.se

#### Fittings, Distributor of:

• Press fittings, radial

# Pipes, Distributor of:

- PE-RT
- PE-RT / AI / ...

- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

#### Thermtec Wärmetechnik GmbH

GERMANY - Euskirchen www.thermtec.de

#### Fittings, Distributor of:

Press fittings, radial

#### Pipes, Distributor of:

- PE-RT / AI / ...
- PE-Xa / Al / ...
- PE-Xc
- PE-Xc / Al / ...

#### **Application / Others:**

- Fastening technology
- Manifolds
- Surface heating and cooling, warm water

# Tiemme Raccorderie S.p.A.

ITALY - Castegnato (BS) www.tiemme.com/eng/index.php

#### **Company Profile:**

Tiemme Raccorderie S.p.A., a "brass fitting factory" that rose to international leadership in the production and marketing of plumbing and heating components, was founded in 1987. Tiemme joined Gnutti Cirillo Group in 1994 and acquired a leadership position in the design, manufacture and sales of products and systems for heating and plumbing sector. Already in the second half of the 90s with the development of the Al-Cobrapex Multilayer System (press fittings and multilayer pipes), Tiemme was among the first companies to open the way to this type of engineering solution and contributed to a true revolution still relevant today in the field.

# Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Sliding sleeves / press fittings, axial
- Welding, gluing or electrofusions fittings

#### Pipes, Distributor of:

■ PE-Xb / Al / ...

#### Pipes, Manufacturer of:

- PE-Xb
- PP-R

- Control technology and equipment
- Surface heating and cooling components
- Surface heating and cooling, warm water

# To Be Comfort ® B.V.

NETHERLANDS - Rotterdam www.tobecomfort.nl

# Pipes, Distributor of:

■ PE-RT

# **Application / Others:**

Surface heating and cooling, warm water

# **Tobler System AG**

SWITZERLAND - Urdorf www.haustechnik.ch

#### Pipes, Distributor of:

- PE-X / Al / ...
- PE-Xa

# **Application / Others:**

- Concrete core activation
- Cooling-ceiling: capillary systems
- Cooling-ceiling: other systems
- Distributor
- preinsulated pipes
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Torneiras Monteiro Lda.

PORTUGAL - Braga www.torneirasmonteiro.com

# Fittings, Distributor of:

Press fittings, radial

# Pipes, Distributor of:

- PE-X / Al / ...
- PP-R

# Totra Plastika d.d.

SLOVENIA - Ljubljana www.totraplastika.si

# Pipes, Distributor of:

- PE
- PP
- PP-R
- PVC

# **Application / Others:**

Drainage, sanitary sewer

# TRA - Tuyauterie & Raccords Avancés

FRANCE - Valence www.tuyauterie-raccord.com

#### Fittings, Distributor of:

• Press fittings, radial

# Pipes, Distributor of:

- PE-X
- PE-X / Al / ...

# Application / Others:

- Pipefitter's, crimp tools/clamps
- Surface heating and cooling components
- Surface heating and cooling, warm water

# TRADE S.A.

SPAIN - Madrid www.tradesa.com

# Pipes, Distributor of:

- PE-Xa
- PE-Xb / Al / ...

- Surface heating and cooling components
- Surface heating and cooling, warm water



SPAIN - Cabanillas del Campo, Guadalajara www.neupex.com

# **Company Profile:**

In 2000, the family Lopez Duvernell founded the company Neupex. Production of thermoplastic PEX and PE-RT pipes, according to regulations, assigned to heating conductions, air conditioning, hot sanitary water and regulation in PPSU, brass and stainless steel.

#### Fittings, Manufacturer of:

- Press fittings, radial
- Welding, gluing or electrofusions fittings

# Pipes, Distributor of:

■ PE-RT / AI / ...

# Pipes, Manufacturer of:

- PE-RT
- PE-Xb

#### **Application / Others:**

- Manifolds
- Surface heating and cooling components

# Tweetop Sp. z o.o.

POLAND - Szczecin www.tweetop.pl

#### **Company Profile:**

Since 2001 Tweetop operates on both Polish and European market, constantly increasing product offer and area of operation. The main product of the company is the Tweetop system, based on PE-RT/Al pipes - since 2007 - and press fittings.

# Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Push fit fittings / tool-less fittings

#### Pipes, Distributor of:

■ PE-Xb / Al / ...

# Pipes, Manufacturer of:

- PE-RT
- PE-RT / AI / ...

#### **Application / Others:**

Surface heating and cooling, warm water

## U-Tube Systems B.V.

NETHERLANDS - Tholen www.u-tubesystems.com

# **Company Profile:**

U-Tube Systems has become a full supplier in the field of heating and cooling systems. They produce piping in its own factory, designed for underfloor heating and the related distribution systems. The company belongs to the C&F Holding BV.

#### Pipes, Manufacturer of:

■ PE-RT

#### Application / Others:

- Control technology and equipment
- Surface heating and cooling components
- Surface heating and cooling, warm water

#### **UNATHERM GmbH**

GERMANY - Reichshof-Wehnrath www.unatherm.com

#### **Company Profile:**

UNATHERM was established as a family business in 1965. From the production of electric floor heating systems, and from transforming PP pipes into tailor made heating grids, the development led to the latest step, the production of PE pipes.

#### Pipes, Manufacturer of:

■ PE-RT

#### Application / Others:

OEM Pipe manufacturer

#### UNIDELTA S.P.A.

ITALY - Vestone (BS) www.unidelta.com

#### **Company Profile:**

Set up in 1973, UNIDELTA S.p.A. makes high- and low-density PEX piping for aqueducts, gas pipelines, irrigation systems, fire hoses, drainage systems and heating systems. UNIDELTA today is a leader in plumbing and heating systems.

# Fittings, Distributor of:

Press fittings, radial

### Fittings, Manufacturer of:

Compression screw fittings

#### Pipes, Manufacturer of:

- PE
- PE-RT
- PE-RT / AI / ...
- PE-Xb
- PE-Xb / Al / ...

# Application / Others:

Manifolds

# UnionPipe Produktionsgesellschaft

GERMANY - Reichshof-Wehnrath www.unionpipe.de

#### **Company Profile:**

Founded in 2010 as a Joint Venture between the German companies Zewotherm and Unatherm. UnionPipe produces PE-RT pipes.

# Pipes, Manufacturer of:

■ PE-RT

# **Unitherm Heating Systems Ltd.**

UNITED KINGDOM - Ballybrit, Galway www.uni-therm.net

#### Fittings, Distributor of:

• Press fittings, radial

# Pipes, Distributor of:

- PE-X
- PE-X / AI / ...

- Distributor
- Surface heating and cooling components
- Surface heating and cooling, warm water

## **Uponor AB**

SWEDEN - Virsbo www.uponor.se

#### **Company Profile:**

1982 Finnish companies Asko Oy and Neste Oy founded Oy Uponor Ab for the manufacture of PVC pipes and acquired the Lubonyl business in Sweden, later named Uponor AB. 1970 Wirsbo commercialises the cross-linking process, and introduces the PE-Xa tubing and 1972 Wirsbo PEX pipe production started in Sweden. Merger of Asko Oyj and Oy Uponor Ab, company's name Uponor Corporation in 2000. Today Uponor has operations in 30 countries, and 9 manufacturing facilities in four countries: Finland, Sweden, Germany and the United States.

#### Fittings, Distributor of:

- Compression screw fittings
- Press fittings, radial

#### Pipes, Distributor of:

- PE
- PE-RT / AI / ...
- PP
- PVC

#### Pipes, Manufacturer of:

PE-Xa

- Corrugated Pipes
- District/local heating
- Drainage, sanitary sewer
- Gas
- Large diameter pipes e.g. sewage pipes
- preinsulated pipes
- Sprinkler system
- Surface heating and cooling components
- Surface heating and cooling, warm water

## **Uponor GmbH**

GERMANY - Hassfurt www.uponor.com

#### **Company Profile:**

Uponor Corporation is a leading international provider of plumbing and indoor climate solutions for residential and commercial building markets across Europe and North America. In northern Europe, Uponor is also a prominent supplier of infrastructure pipe systems. Today Uponor has operations in 30 countries, and 9 manufacturing facilities in four countries: Finland, Sweden, Germany and the United States.

# Fittings, Manufacturer of:

Compression screw fittings

Press fittings, radial

#### Pipes, Distributor of:

- PE-RT
- PE-Xa
- PE-Xb / Al / ...

#### Pipes, Manufacturer of:

■ PE-RT / AI / ...

- Compressed air
- Concrete core activation
- Control technology and equipment
- Cooling-ceiling: other systems
- Fastening technology
- Gas
- Manifolds
- preinsulated pipes
- Snow melting systems, sport grounds heating, road de-icing
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Valsir S.p.A.

ITALY - Vestone (BS) www.valsir.it

#### **Company Profile:**

Valsir, created by the Fonditalgroup, was founded in 1987. Valsir offers the market advanced systems for waste, drainage and water supply.

# Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial

#### Pipes, Distributor of:

- PE
- PP
- PP-R

#### Pipes, Manufacturer of:

- PE-Xb
- PE-Xb / Al / ...

## Application / Others:

- Drainage, sanitary sewer
- Snow melting systems, sport grounds heating, road de-icing
- Surface heating and cooling, warm water

#### Valtec S.r.l.

ITALY - Brescia (BS) www.valtecsrl.com

#### **Company Profile:**

In 2002 VALTEC S.r.L., Italy, shortly launched manufacturing of a wide product range; its development was based on competitors product line assessment results. Supplies to Russian market started the year after. The products of VALTEC sanitary engineering are the most wide-spreading in Russia. Every year over 1.2 million square meters of residential housing are equipped with VALTEC in central Russia.

#### Fittings, Distributor of:

- Compression screw fittings
- Press fittings, radial

# Pipes, Distributor of:

- PE-Xb
- PE-Xb / Al / ...

#### Pipes, Manufacturer of:

- Pipes / PP-R composite fibre
- PP-R
- PP-R Stabi (AI)

- Control technology and equipment
- Cooling-ceiling: other systems
- Manifolds
- Pipe insulation
- Pipefitter's, crimp tools/clamps

# Variotherm Heizsysteme GmbH

AUSTRIA - Leobersdorf www.variotherm.at

#### Pipes, Distributor of:

■ PE-RT / AI / ...

## **Application / Others:**

- Surface heating and cooling components
- Surface heating and cooling, warm water

# Vasco Group by

Brugman Radiatorenfabriek bv NETHERLANDS - Tubbergen www.brugman.net

#### **Company Profile:**

The Vasco Group, founded and grown by Jos Vaessen and in 2018 acquired by Arbonia AG, is a company for radiators, underfloor heating and ventilation for residential apartment construction. More than 600 employees work in the four production plants. Vasco occupies a leading market position in Belgium and the Netherlands.

#### Pipes, Distributor of:

- PE-RT
- PE-RT / Al / ...
- PE-Xc

#### **Application / Others:**

- Surface heating and cooling components
- Surface heating and cooling, warm water

# Vasco Group byba

(formerly: The Heating Company byba)

BELGIUM - Dilsen www.vasco-group.eu

#### **Company Profile:**

The Vasco Group, founded and grown by Jos Vaessen and in 2018 acquired by Arbonia AG, is a company for radiators, underfloor heating and ventilation for residential apartment construction. More than 600 employees work in the four production plants. Vasco occupies a leading market position in Belgium and the Netherlands.

# Pipes, Distributor of:

■ PE-RT / AI / ...

#### Pipes, Manufacturer of:

- PE-RT
- PE-Xa

- Surface heating and cooling components
- Surface heating and cooling, warm water

# Velta Eurojauge

FRANCE - Furdenheim www.velta.fr

#### Pipes, Distributor of:

- PE-Xa
- PE-Xb

# Vermo Vloerverwarmingssystemen B.V.

NETHERLANDS - Roosendaal www.vermo.nl

#### Pipes, Distributor of:

■ PE-RT

#### Application / Others:

- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Viega GmbH & Co. KG

GERMANY - Attendorn www.viega.de

#### **Company Profile:**

Viega is the global leader in press pipe fitting technology for industrial, commercial and residential projects. A true innovator among imitators, Viega manufactures and distributes the world's best plumbing, heating and pipe joining system solutions. Founded in 1899, the Viega Group began in Germany and, in 1999, Viega LLC introduced North America to the pipe joining solution that changed the industry, Viega ProPress.

#### Fittings, Manufacturer of:

Press fittings, radial

#### Pipes, Distributor of:

- Copper
- Stainless steel
- Steel

# Pipes, Manufacturer of:

- PB
- PE-RT
- PE-RT / AI / ...
- PE-Xc
- PE-Xc / Al / ...

- Manifolds
- Pipefitter's, crimp tools/clamps
- Surface heating and cooling components
- Surface heating and cooling, warm water



BELGIUM - Puurs www.vigotecakatherm.be

#### Fittings, Distributor of:

Push fit fittings / tool-less fittings

#### Pipes, Distributor of:

- PE-RT / AI / ...
- PVC-C

### **Application / Others:**

Drainage, sanitary sewer

# VSH Fittings B.V.

NETHERLANDS - Hilversum www.vsh-fittings.com

#### **Company Profile:**

Founded in 1957 and token over by Aalberts Group in 1991, VSH offers a wide range of products with the broadest selection of piping systems in the market. In over 80 years time VSH has become market leader in installation components in the Netherlands and is a very well-known organisation in the domestic and commercial building market in many countries.

#### Fittings, Manufacturer of:

- Compression screw fittings
- Press fittings, radial
- Push fit fittings / tool-less fittings

#### Pipes, Distributor of:

- PE-RT / AI / ...
- PE-X
- PE-X / Al / ...

#### VSZM Kft.

Villamosszigetelő és Műanyaggyár Kft. HUNGARY - Budapest www.vszmkft.hu

#### **Company Profile:**

Villamosszigetelő és Műanyaggyár Kft., (generally used short name VSZM Kft.) is a plastic processing factory. The company was established in 1883.

# Pipes, Manufacturer of:

- PE
- PE-RT
- PE-Xb
- PP-R

# Warmup Plc

UNITED KINGDOM - London www.warmup.co.uk

#### **Company Profile:**

Warmup is a certified ISO 9001:2015 UK based manufacturing Plc creating and delivering underfloor heating solutions (electric, hydronic and hybrid – a mixture of both). Warmup is the only underfloor heating company whose products are European compliant, CE marked and accredited by more independent institutions than anyone else in the industry.

# Pipes, Distributor of:

- PE-RT
- PE-RT / Al / ...
- PE-Xa

# Application / Others:

- Surface heating and cooling components
- Surface heating and cooling, electrical
- Surface heating and cooling, warm water

#### Watts Industries Italia S.r.I.

ITALY - Biassono (MB) www.wattsindustries.it

# **Company Profile:**

Watts Industries Italia S.r.I. is a leader on the Italian heating, air conditioning and plumbing market. The company launched systems and products such as flush Modul manifolds, zone control, quick-connect one-piece fittings, balancing valves, heat metering/billing systems and hydraulic backflow preventer units.

#### Pipes, Distributor of:

■ PE-Xa

# Application / Others:

- Drainage, sanitary sewer
- Manifolds
- preinsulated pipes
- Surface heating and cooling components
- Surface heating and cooling, warm water

#### Watts Insulation NV

BELGIUM - Rotselaar www.microflex.be

#### **Company Profile:**

Microflex N.V. was acquired by Watts Water Technologies, Inc. in 2005. Watts Insulation NV produces and distributes flexible, pre-insulated, waterproof PEX pipes for hot and cold water transport, as well as a range of accessory products including couplings, caps, and insulation kits. In 2015 Production and Logistics Center of Microflex pipes moved into its plant located in Italy.

#### Pipes, Distributor of:

PE-Xa

- District/local heating
- Pipe insulation
- preinsulated pipes

# Watts Water Technologies EMEA B.V.

NETHERLANDS - Eerbeek www.wattsindustries.com

#### **Company Profile:**

Watts Water Technologies EMEA B.V. is the European Holding Company and is a Division of Watts Water Technologies Inc., a world-wide leading manufacturer of products that contribute to comfort and safety in the area of water (quality) for domestic, commercial and industrial applications. Watts Water Technologies EMEA develops and manufactures an extensive range of valves, units, controls and accessories, with sales generated through specialized wholesale distributors and OEM's.

#### Pipes, Distributor of:

- PE-RT
- PE-Xa
- PE-Xb
- PE-Xb / Al / ...

#### Application / Others:

- Control technology and equipment
- Manifolds
- Surface heating and cooling, warm water

# WAVIN Ekoplastik s.r.o.

CZECH REPUBLIC - Kostelec nad Labem www.ekoplastik.com

#### **Company Profile:**

EKOPLASTIK is present on the market of plastic piping systems since 1990. In November 2004 multination corporation Wavin entered Ekoplastik company. Their major products range covers PP plastic piping systems of pressure and/or hot water (heating) distribution. WAVIN Ekoplastik s.r.o. is a dominant producer of those systems in the Czech Republic and ranks among the leading European manufacturers.

#### Fittings, Manufacturer of:

Welding, gluing or electrofusions fittings

#### Pipes, Manufacturer of:

- Pipes / PP-R composite fibre
- PP-R
- PP-R Stabi (AI)

#### Wavin GmbH

GERMANY - Twist www.wavin.de

#### Fittings, Distributor of:

Push fit fittings / tool-less fittings

#### Fittings, Manufacturer of:

• Press fittings, radial

#### Pipes, Distributor of:

- PB
- PE-Xc
- PE-Xc / Al / ...
- PP-R
- PVC

#### Pipes, Manufacturer of:

- PE
- PP

# Wavin Italia s.p.a. - Divisione Chemidro

ITALY - S. Maria Maddalena (RO) chemidro.wavin.com

# Pipes, Distributor of:

- PB
- PE-RT / Al / ...
- PE-X / Al / ...
- PE-Xa
- PE-Xc / Al / ...

#### Pipes, Manufacturer of:

- PE
- PP

# Application / Others:

- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

#### **Wavin Limited**

UNITED KINGDOM - Doncaster, South Yorkshire www.wavin.co.uk

# **Company Profile:**

Established in 1962, Wavin Limited - part of the Wavin Group - is the UK's leading supplier of water management, plumbing, heating and drainage systems for the Building, Construction and Utilities markets. Since mid-2012, Wavin is part of the Mexichem Group, leader in plastic pipe systems and in the chemical and petrochemical industry in Latin America.

#### Fittings, Manufacturer of:

Push fit fittings / tool-less fittings

# Pipes, Manufacturer of:

PB

#### Wavin N.V.

NETHERLANDS - Zwolle www.wavin.com

# **Company Profile:**

Wavin is a leading supplier of plastic pipe systems and solutions. They connect to better solutions for above and below ground projects in the following application areas: Water management, heating and cooling, water and gas distribution, waste water drainage and cable ducting. The company is part of Mexichem and is organised in four European regions, the Head Office is located in the Netherlands.

#### Fittings, Manufacturer of:

- Press fittings, radial
- Push fit fittings / tool-less fittings

# Pipes, Distributor of:

- PB
- PE
- PE-Xc
- PE-Xc / Al / ...
- PP-R
- PVC

# **Application / Others:**

- Compressed air
- Drainage, sanitary sewer
- Fire prevention
- Gas
- Surface heating and cooling, warm water

# WeeCon-PipeSystems Ltd.

GERMANY - Meerbusch www.weecon.de

#### Fittings, Distributor of:

• Press fittings, radial

#### Pipes, Distributor of:

- Copper
- PE-X / AI / ...
- Stainless steel
- Steel

#### Wefatherm GmbH

GERMANY - Wunstorf www.wefatherm.de

#### **Company Profile:**

Since its foundation in 1988 by Peter Fassbender under the name Wefa Plastic gbR, Wefatherm has always been a pioneer in PP-R pipe systems that transformed the business model from production of fittings only into a system producer for water supply systems. The acquisition in 2001 by the present Aliaxis group opened additional growth opportunities, especially for the PP-R products. The name Wefa Plastic GmbH changed to Wefatherm GmbH in 2012 when the export responsibility transferred to Akatherm BV in Panningen, Netherlands.

#### Pipes, Manufacturer of:

- Pipes / PP-R composite fibre
- PP-R
- PP-R Stabi (AI)

# Wieland-Werke AG

GERMANY - Ulm www.wieland.de

#### **Company Profile:**

The Wieland Group, specialist in copper and copper alloys, is in demand around the globe and is highly regarded for both its expertise and its products. The company and its subsidiaries are represented with numerous sites on various continents.

#### Fittings, Manufacturer of:

- Press fittings, radial
- Sliding sleeves / press fittings, axial

# Pipes, Manufacturer of:

- Copper
- Copper and plastic

# Winkler Heizung und Sanitärhandel

AUSTRIA - Pinkafeld www.winkler-heizung.at

# Pipes, Distributor of:

- PE / Al / ...
- PE-Xc / Al / ...

# Application / Others:

- Fastening technology
- Manifolds
- Pipe insulation
- Pipefitter's, crimp tools/clamps

# **WRW Pipes GmbH**

GERMANY - Ahlen www.wrw-ahlen.de

### **Company Profile:**

WRW manufactures aluminium multilayer pipes in the dimensions up to 110 mm for housing installations and industrial solutions.

# Pipes, Manufacturer of:

- PE-RT / AI / ...
- PP-R / Al / ...

# WS Weinmann und Schanz GmbH

GERMANY - Balingen-Frommern www.weinmann-schanz.de

# Fittings, Distributor of:

Press fittings, radial

#### Pipes, Distributor of:

- Copper
- PE-RT / Al / ...
- PE-X / Al / ...
- PE-Xc / Al / ...
- PP-R
- Stainless steel
- Steel

# **Application / Others:**

- Control technology and equipment
- Distributor
- Fastening technology

# WTH Vloerverwarming B.V.

BELGIUM - Dordrecht www.wth.nl

#### Pipes, Distributor of:

- PE / AI / ...
- PE-RT
- PE-X

#### Application / Others:

- Manifolds
- Surface heating and cooling components
- Surface heating and cooling, warm water

# Zent-Frenger Ges. für Gebäudetechnik mbH

GERMANY - Heppenheim www.zent-frenger.de

#### Fittings, Distributor of:

• Press fittings, radial

#### Pipes, Distributor of:

■ PE-Xa

- Concrete core activation
- Cooling-ceiling: other systems
- Surface heating and cooling, warm water

# Zetaesse SpA

ITALY - Vedelago (TV) www.zetaesse.it

#### **Company Profile:**

Established in 1973 by Cav. Luigi Vittorio Zecchin, Zetaesse immediately gives a turning to the standard plumbing technique by introducing the first pre-insulated copper tube named "CUPEX", the brand that gave start to the "energy saving" era. Throughout its history Zetaesse boasts of being the first in several technological innovations. In this development, trying to meet the demands of a changing and evolving market, Zetaesse decides today to address two "bets" looking at two completely new areas: the production of crosslinked polyethylene foam and the production of multilayer pipes.

# Fittings, Distributor of:

• Press fittings, radial

#### Pipes, Manufacturer of:

- Copper
- Copper and plastic
- PE-Xb / Al / ...

#### Zewotherm GmbH

GERMANY - Remagen www.zewotherm.de

# Fittings, Distributor of:

- Press fittings, radial
- Push fit fittings / tool-less fittings

#### Pipes, Distributor of:

- PB
- PE-RT
- PE-RT / AI / ...
- PE-Xa
- PE-Xb / Al / ...
- PE-Xc
- PE-Xc / Al / ...

- Concrete core activation
- Control technology and equipment
- Fastening technology
- Manifolds
- Pipe insulation
- Surface heating and cooling components
- Surface heating and cooling, warm water

# 9 Consumption of Heating & Plumbing Pipes in "Tons" 2017 - 2022

# How to Convert Pipe Meters into Tons

The standard units for pipes are "Million Meters" and Tons. Following the frequency of the different dimensions of the pipe and the associated wall thickness, it is approximately possible to convert pipe meters into tons.

# Frequency of Multilayer + Stainless Steel Pipe Dimensions

(Dimension = Outside Diameter x Wallthickness)

Radiator Heating Pipes: Most used dimension d=16 mm

#### **Plumbing Systems** Multilayer Stainless Steel $14 \times 2.00 = 12\%$ $15 \times 1.0 = 33\%$ $16 \times 2,00 = 25\%$ $18 \times 1,0 = 15\%$ $18 \times 2,00 = 14\%$ $22 \times 1,2 = 23\%$ $20 \times 2,25 = 22\%$ $28 \times 1.2 = 15\%$ $25 \times 2,25 = 13\%$ $35 \times 1,5 = 7\%$ $32 \times 3,00 = 7\%$ $42 \times 1,5 = 4\%$ $40 \times 4,00 = 4\%$ $54 \times 1,5 = 3\%$ >40 = 3%

Concersion table: pipes in "million meters" into "tons material"

Steel: Mio m x 640 = Tons (640 Gramme per meter Pipe) Copper: Mio m x 420 = Tons (420 Gramme per meter Pipe) Stainless steel: Mio m x 640 = Tons (640 Gramme per meter Pipe)

**PE-X/PE-RT:** Mio m  $\times$  85 = Tons (85 Gramme per meter Pipe incl. Fittings)

PP-R: Mio m  $\times$  220 = Tons (220 Gramme per meter Pipe) PB: Mio m  $\times$  110 = Tons (110 Gramme per meter Pipe)

Multilayer: Mio m  $\times$  130 = Tons (ALU Thickness:middle)

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# 9.1 AUT - Austria

# Floor Heating / Surface Heating & Cooling - Austria

Su	Year	ı	Metal-Pip	oes		Plastic-l	Pipes		Multi	To	otals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es ::	2019	0.0	105.0	0.0	527.8	771.8	46.2	42.9	364.0	105.0	1,388.8	1,857.8
Pipes	2020	0.0	109.2	0.0	532.9	787.9	44.0	44.0	367.9	109.2	1,408.9	1,886.0
_	2021	0.0	109.2	0.0	551.6	834.7	44.0	46.2	383.5	109.2	1,476.6	1,969.3
	2022	0.0	109.2	0.0	568.6	878.9	44.0	47.3	395.2	109.2	1,538.8	2,043.2
ge on Years	2023	0.0	113.4	0.0	584.8	922.2	44.0	48.4	410.8	113.4	1,599.4	2,123.6
% Change o	2019	_	0.0	_	-28.5	46.0	0.0	2.6	21.2	0.0	2.5	5.5
	2020	-	4.0	_	1.0	2.1	-4.8	2.6	19.4	4.0	1.5	4.7
% C	2021	-	0.0	-	3.5	5.9	0.0	5.0	23.2	0.0	4.8	7.6
o,	2022	-	0.0	_	3.1	5.3	0.0	2.4	21.8	0.0	4.2	7.0
ø	2023	-	3.8	-	2.8	4.9	0.0	2.3	22.8	3.8	3.9	7.1
Share	2019	0.0	5.7	0.0	28.4	41.5	2.5	2.3	19.6	5.7	74.8	100.0
	2020	0.0	5.8	0.0	28.3	41.8	2.3	2.3	19.5	5.8	74.7	100.0
ar A	2021	0.0	5.5	0.0	28.0	42.4	2.2	2.3	19.5	5.5	75.0	100.0
Market	2022	0.0	5.3	0.0	27.8	43.0	2.2	2.3	19.3	5.3	75.3	100.0
%	2023	0.0	5.3	0.0	27.5	43.4	2.1	2.3	19.3	5.3	75.3	100.0

# Radiator Connection - Austria

SL	Year	N	Лetal-Рір	es		Plastic-	Pipes		Multi	To	tals	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	467.2	1,197.0	0.0	74.8	17.8	0.0	20.9	470.6	1,664.2	113.5	2,248.4
Pipes	2020	467.2	1,201.2	0.0	74.8	17.8	0.0	20.9	473.2	1,668.4	113.5	2,255.2
_	2021	467.2	1,213.8	0.0	75.6	17.8	0.0	20.9	494.0	1,681.0	114.4	2,289.4
	2022	473.6	1,230.6	0.0	76.5	17.8	0.0	20.9	501.8	1,704.2	115.2	2,321.3
on ears	2023	473.6	1,243.2	0.0	76.5	17.8	0.0	20.9	507.0	1,716.8	115.2	2,339.0
% Change o	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	0.0	0.4	_	0.0	0.0	_	0.0	18.8	0.3	0.0	3.6
% C	2021	0.0	1.0	-	1.1	0.0	-	0.0	23.4	8.0	0.7	4.9
۰, <del>Մ</del>	2022	1.4	1.4	_	1.1	0.0	_	0.0	20.0	1.4	0.7	4.9
Φ	2023	0.0	1.0	-	0.0	0.0	-	0.0	19.4	0.7	0.0	4.2
Share	2019	20.8	53.2	0.0	3.3	0.8	0.0	0.9	20.9	74.0	5.1	100.0
	2020	20.7	53.3	0.0	3.3	8.0	0.0	0.9	21.0	74.0	5.0	100.0
Market	2021	20.4	53.0	0.0	3.3	8.0	0.0	0.9	21.6	73.4	5.0	100.0
	2022	20.4	53.0	0.0	3.3	8.0	0.0	0.9	21.6	73.4	5.0	100.0
%	2023	20.2	53.1	0.0	3.3	0.8	0.0	0.9	21.7	73.4	4.9	100.0

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# Sanitary / Hot & Cold Water Systems - Austria

Su	Year	ı	Metal-Pip	oes		Plastic-	Pipes		Multi	To	tals	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	0.0	1,650.6	224.0	82.4	66.3	404.8	28.6	754.0	1,874.6	582.2	3,210.8
Pipes	2020	0.0	1,680.0	230.4	83.3	67.2	409.2	28.6	768.3	1,910.4	588.3	3,267.0
_	2021	0.0	1,722.0	236.8	85.0	68.0	422.4	29.7	787.8	1,958.8	605.1	3,351.7
% Change on Previous Years	2022	0.0	1,764.0	243.2	86.7	68.9	431.2	29.7	807.3	2,007.2	616.4	3,431.0
	2023	0.0	1,785.0	243.2	87.6	69.7	437.8	29.7	817.7	2,028.2	624.8	3,470.6
	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	1.8	2.9	1.0	1.3	1.1	0.0	20.4	1.9	1.0	5.6
	2021	-	2.5	2.8	2.0	1.3	3.2	3.8	21.2	2.5	2.9	6.4
o,	2022	-	2.4	2.7	2.0	1.3	2.1	0.0	21.1	2.5	1.9	6.2
υ	2023	-	1.2	0.0	1.0	1.2	1.5	0.0	19.7	1.0	1.3	5.0
Share	2019	0.0	51.4	7.0	2.6	2.1	12.6	0.9	23.5	58.4	18.1	100.0
Market	2020	0.0	51.4	7.1	2.5	2.1	12.5	0.9	23.5	58.5	18.0	100.0
	2021	0.0	51.4	7.1	2.5	2.0	12.6	0.9	23.5	58.4	18.1	100.0
	2022	0.0	51.4	7.1	2.5	2.0	12.6	0.9	23.5	58.5	18.0	100.0
%	2023	0.0	51.4	7.0	2.5	2.0	12.6	0.9	23.6	58.4	18.0	100.0

# Heating & Plumbing Pipes - Austria

Su	Year	ľ	Metal-Pi <sub>l</sub>	oes		Plastic-	Pipes		Multi	To	tals	Total
ר Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	0.7	7.0	0.4	8.1	10.1	2.1	0.8	12.2	8.1	21.0	41.4
Pipes	2020	0.7	7.1	0.4	8.1	10.3	2.1	0.9	12.4	8.2	21.3	41.9
_	2021	0.7	7.3	0.4	8.4	10.8	2.1	0.9	12.8	8.4	22.2	43.4
	2022	0.7	7.4	0.4	8.6	11.4	2.2	0.9	13.1	8.5	23.0	44.6
ge on Years	2023	0.7	7.5	0.4	8.8	11.9	2.2	0.9	13.4	8.6	23.8	45.7
% Change or Previous Year	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	0.0	1.3	2.9	0.9	2.0	0.5	1.2	1.3	1.2	1.4	1.3
	2021	0.0	1.8	2.8	3.1	5.5	2.9	3.5	3.5	1.7	4.2	3.5
o,	2022	1.4	1.9	2.7	2.7	4.9	1.9	1.1	2.3	1.9	3.7	2.9
Φ	2023	0.0	1.2	0.0	2.3	4.6	1.4	1.1	1.8	1.1	3.3	2.4
Market Share	2019	1.8	17.0	0.9	19.5	24.4	5.0	2.0	29.6	19.6	50.8	100.0
	2020	1.7	17.0	0.9	19.4	24.5	4.9	2.0	29.6	19.6	50.9	100.0
	2021	1.7	16.7	0.9	19.3	25.0	4.9	2.0	29.5	19.3	51.2	100.0
	2022	1.7	16.6	0.9	19.3	25.5	4.8	2.0	29.4	19.1	51.6	100.0
%	2023	1.6	16.4	8.0	19.3	26.0	4.8	2.0	29.2	18.8	52.0	100.0

# 9.2 BEL - Belgium

# Floor Heating / Surface Heating & Cooling - Belgium

SL	Year	ı	Metal-Pip	oes		Plastic-F	Pipes		Multi	To	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
.= Se	2019	0.0	79.8	0.0	476.8	429.2	0.0	0.0	405.6	79.8	906.1	1,391.5
Pipes	2020	0.0	79.8	0.0	482.0	429.2	0.0	0.0	400.4	79.8	911.2	1,391.4
_	2021	0.0	84.0	0.0	504.0	442.0	0.0	0.0	399.1	84.0	946.0	1,429.1
	2022	0.0	84.0	0.0	530.4	463.2	0.0	0.0	405.6	84.0	993.6	1,483.2
ge on Years	2023	0.0	88.2	0.0	564.4	490.4	0.0	0.0	419.9	88.2	1,054.8	1,562.9
% Change o Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	
	2020	_	0.0	_	1.1	0.0	_	_	16.7	0.0	0.6	4.7
% C	2021	-	5.3	-	4.6	3.0	-	-	17.8	5.3	3.8	7.5
o,	2022	-	0.0	_	5.2	4.8	_	_	20.1	0.0	5.0	8.4
Φ	2023	-	5.0	-	6.4	5.9	-	-	22.3	5.0	6.2	10.0
Share	2019	0.0	5.7	0.0	34.3	30.8	0.0	0.0	29.1	5.7	65.1	100.0
Market	2020	0.0	5.7	0.0	34.6	30.9	0.0	0.0	28.8	5.7	65.5	100.0
	2021	0.0	5.9	0.0	35.3	30.9	0.0	0.0	27.9	5.9	66.2	100.0
	2022	0.0	5.7	0.0	35.8	31.2	0.0	0.0	27.3	5.7	67.0	100.0
%	2023	0.0	5.6	0.0	36.1	31.4	0.0	0.0	26.9	5.6	67.5	100.0

# Radiator Connection - Belgium

SL	Year	N	Лetal-Рір	oes		Plastic-l	Pipes		Multi	To	tals	Total
. Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	652.8	667.8	0.0	65.4	22.1	0.0	0.0	737.1	1,320.6	87.6	2,145.2
Pipes	2020	601.6	617.4	0.0	59.5	20.4	0.0	0.0	683.8	1,219.0	79.9	1,982.7
_	2021	576.0	592.2	0.0	56.1	18.7	0.0	0.0	656.5	1,168.2	74.8	1,899.5
	2022	569.6	588.0	0.0	54.4	17.8	0.0	0.0	650.0	1,157.6	72.2	1,879.8
ears	2023	569.6	588.0	0.0	53.6	17.0	0.0	0.0	650.0	1,157.6	70.6	1,878.2
% Change or Previous Yes	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-7.8	-7.5	_	-9.1	-7.7	_	_	9.6	-7.7	-8.7	-2.4
% C	2021	-4.3	-4.1	_	-5.7	-8.3	-	-	13.5	-4.2	-6.4	1.2
۰, <del>Մ</del>	2022	-1.1	-0.7	-	-3.0	-4.5	_	-	17.0	-0.9	-3.4	4.5
Φ	2023	0.0	0.0	-	-1.6	-4.8	-	-	18.2	0.0	-2.4	5.5
Share	2019	30.4	31.1	0.0	3.1	1.0	0.0	0.0	34.4	61.6	4.1	100.0
	2020	30.3	31.1	0.0	3.0	1.0	0.0	0.0	34.5	61.5	4.0	100.0
Market	2021	30.3	31.2	0.0	3.0	1.0	0.0	0.0	34.6	61.5	3.9	100.0
	2022	30.3	31.3	0.0	2.9	0.9	0.0	0.0	34.6	61.6	3.8	100.0
%	2023	30.3	31.3	0.0	2.9	0.9	0.0	0.0	34.6	61.6	3.8	100.0

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# Sanitary / Hot & Cold Water Systems - Belgium

SL	Year	I	Metal-Pip	oes		Plastic-l	Pipes		Multi	To	tals	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	0.0	1,171.8	300.8	67.2	54.4	0.0	0.0	1,235.0	1,472.6	121.6	2,829.2
Pipes	2020	0.0	1,121.4	288.0	63.8	51.8	0.0	0.0	1,180.4	1,409.4	115.6	2,705.4
_	2021	0.0	1,108.8	281.6	62.9	51.0	0.0	0.0	1,164.8	1,390.4	113.9	2,669.1
	2022	0.0	1,129.8	288.0	63.8	51.8	0.0	0.0	1,186.9	1,417.8	115.6	2,720.3
ge on Years	2023	0.0	1,150.8	294.4	64.6	52.7	0.0	0.0	1,207.7	1,445.2	117.3	2,770.2
₩,	2019	_	_	_	_	_	_	_	_	_	_	_
har ious	2020	_	-4.3	-4.3	-5.1	-4.7	_	_	13.0	-4.3	-4.9	2.5
% Char Previous	2021	-	-1.1	-2.2	-1.3	-1.6	-	_	16.6	-1.3	-1.5	5.8
∘∕	2022	-	1.9	2.3	1.4	1.7	_	-	20.4	2.0	1.5	9.3
υ	2023	-	1.9	2.2	1.3	1.6	-	-	20.3	1.9	1.5	9.2
Share	2019	0.0	41.4	10.6	2.4	1.9	0.0	0.0	43.7	52.1	4.3	100.0
Market	2020	0.0	41.5	10.6	2.4	1.9	0.0	0.0	43.6	52.1	4.3	100.0
	2021	0.0	41.5	10.6	2.4	1.9	0.0	0.0	43.6	52.1	4.3	100.0
	2022	0.0	41.5	10.6	2.3	1.9	0.0	0.0	43.6	52.1	4.2	100.0
%	2023	0.0	41.5	10.6	2.3	1.9	0.0	0.0	43.6	52.2	4.2	100.0

# Heating & Plumbing Pipes - Belgium

SL	Year	ľ	Metal-Pip	es		Plastic-F	Pipes		Multi	To	tals	Total
Tons ו		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	652.8	1,919.4	300.8	609.5	505.8	0.0	0.0	2,011.9	2,873.0	1,115.2	6,000.1
Pipes	2020	601.6	1,818.6	288.0	605.2	501.5	0.0	0.0	1,916.2	2,708.2	1,106.7	5,731.1
_	2021	576.0	1,785.0	281.6	623.1	511.7	0.0	0.0	1,878.8	2,642.6	1,134.8	5,656.2
	2022	569.6	1,801.8	288.0	648.6	533.0	0.0	0.0	1,897.5	2,659.4	1,181.5	5,738.4
ge on Years	2023	569.6	1,827.0	294.4	682.6	560.2	0.0	0.0	1,927.2	2,691.0	1,242.7	5,860.9
% Change o	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-7.8	-5.3	-4.3	-0.7	-0.8	_	_	-4.8	-5.7	-0.8	-4.5
	2021	-4.3	-1.9	-2.2	3.0	2.0	-	-	-2.0	-2.4	2.5	-1.3
۰, ۳	2022	-1.1	0.9	2.3	4.1	4.2	_	-	1.0	0.6	4.1	1.5
Φ	2023	0.0	1.4	2.2	5.2	5.1	-	-	1.6	1.2	5.2	2.1
Share	2019	10.9	32.0	5.0	10.2	8.4	0.0	0.0	33.5	47.9	18.6	100.0
Market	2020	10.5	31.7	5.0	10.6	8.8	0.0	0.0	33.4	47.3	19.3	100.0
	2021	10.2	31.6	5.0	11.0	9.1	0.0	0.0	33.2	46.7	20.1	100.0
	2022	9.9	31.4	5.0	11.3	9.3	0.0	0.0	33.1	46.3	20.6	100.0
%	2023	9.7	31.2	5.0	11.7	9.6	0.0	0.0	32.9	45.9	21.2	100.0

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# 9.3 CZE - Czech Republic

# Floor Heating / Surface Heating & Cooling - Czech Republic

SL	Year	ı	Metal-Pip	oes		Plastic-	Pipes		Multi	To	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es =:	2019	0.0	75.6	0.0	105.4	130.0	6.6	3.3	148.2	75.6	245.4	469.2
Pipes	2020	0.0	75.6	0.0	108.0	133.5	6.6	3.3	148.2	75.6	251.3	475.1
_	2021	0.0	79.8	0.0	115.6	143.6	6.6	3.3	156.0	79.8	269.2	505.0
	2022	0.0	84.0	0.0	125.8	156.4	8.8	4.4	163.8	84.0	295.4	543.2
ge on Years	2023	0.0	88.2	0.0	136.0	169.2	8.8	4.4	170.3	88.2	318.3	576.8
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-	0.0	_	2.4	2.6	0.0	0.0	18.2	0.0	2.4	6.4
	2021	-	5.6	-	7.1	7.6	0.0	0.0	24.4	5.6	7.1	11.6
о, П	2022	-	5.3	_	8.8	8.9	33.3	33.3	24.1	5.3	9.8	12.9
Φ	2023	-	5.0	-	8.1	8.2	0.0	0.0	22.9	5.0	7.8	11.4
Share	2019	0.0	16.1	0.0	22.5	27.7	1.4	0.7	31.6	16.1	52.3	100.0
	2020	0.0	15.9	0.0	22.7	28.1	1.4	0.7	31.2	15.9	52.9	100.0
Market	2021	0.0	15.8	0.0	22.9	28.4	1.3	0.7	30.9	15.8	53.3	100.0
	2022	0.0	15.5	0.0	23.2	28.8	1.6	8.0	30.2	15.5	54.4	100.0
%	2023	0.0	15.3	0.0	23.6	29.3	1.5	8.0	29.5	15.3	55.2	100.0

# Radiator Connection - Czech Republic

Su	Year	N	Metal-Pip	es		Plastic	-Pipes		Multi	To	tals	Total
Tons ר		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	492.8	1,944.6	0.0	51.0	23.0	19.8	30.8	226.2	2,437.4	124.6	2,788.2
Pipe	2020	467.2	1,822.8	0.0	47.6	21.2	17.6	28.6	213.2	2,290.0	115.0	2,618.2
_	2021	467.2	1,822.8	0.0	47.6	21.2	17.6	28.6	214.5	2,290.0	115.0	2,619.5
	2022	480.0	1,873.2	0.0	48.4	22.1	17.6	29.7	221.0	2,353.2	117.8	2,692.0
on ears	2023	492.8	1,927.8	0.0	50.2	22.1	17.6	29.7	228.8	2,420.6	119.6	2,769.0
₩ <i>&gt;</i>	2019	_	_	_	_	_	_	_	_	_	_	_
% Change Previous Y	2020	-5.2	-6.3	_	-6.7	-7.4	-11.1	-7.1	11.4	-6.0	-7.6	-4.9
	2021	0.0	0.0	-	0.0	0.0	0.0	0.0	18.9	0.0	0.0	1.3
۰, ۳	2022	2.7	2.8	_	1.8	4.0	0.0	3.8	21.8	2.8	2.4	4.1
Φ	2023	2.7	2.9	-	3.5	0.0	0.0	0.0	22.4	2.9	1.4	4.2
Share	2019	17.7	69.7	0.0	1.8	0.8	0.7	1.1	8.1	87.4	4.5	100.0
Market	2020	17.8	69.6	0.0	1.8	8.0	0.7	1.1	8.1	87.5	4.4	100.0
	2021	17.8	69.6	0.0	1.8	0.8	0.7	1.1	8.2	87.4	4.4	100.0
	2022	17.8	69.6	0.0	1.8	8.0	0.7	1.1	8.2	87.4	4.4	100.0
%	2023	17.8	69.6	0.0	1.8	8.0	0.6	1.1	8.3	87.4	4.3	100.0

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# Sanitary / Hot & Cold Water Systems - Czech Republic

SL	Year	N	Лetal-Рір	es		Plastic-	Pipes		Multi	To	tals	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	505.6	667.8	6.4	74.0	71.4	602.8	8.8	141.7	1,179.8	757.0	2,078.5
Pipes	2020	467.2	634.2	6.4	71.4	68.0	572.0	8.8	135.2	1,107.8	720.2	1,963.2
_	2021	467.2	642.6	6.4	72.2	68.9	580.8	8.8	136.5	1,116.2	730.7	1,983.4
	2022	467.2	659.4	6.4	75.6	71.4	602.8	8.8	141.7	1,133.0	758.7	2,033.4
ge on Years	2023	467.2	684.6	12.8	78.2	74.0	622.6	9.9	145.6	1,164.6	784.6	2,094.8
% Change on Previous Yes	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-7.6	-5.0	0.0	-3.4	-4.8	-5.1	0.0	12.8	-6.1	-4.9	-4.5
% C	2021	0.0	1.3	0.0	1.2	1.3	1.5	0.0	19.3	8.0	1.5	2.1
۰, ۳	2022	0.0	2.6	0.0	4.7	3.7	3.8	0.0	22.7	1.5	3.8	3.6
υ	2023	0.0	3.8	100.0	3.4	3.6	3.3	12.5	21.4	2.8	3.4	4.1
Share	2019	24.3	32.1	0.3	3.6	3.4	29.0	0.4	6.8	56.8	36.4	100.0
<del>1</del>	2020	23.8	32.3	0.3	3.6	3.5	29.1	0.4	6.9	56.4	36.7	100.0
Market	2021	23.6	32.4	0.3	3.6	3.5	29.3	0.4	6.9	56.3	36.8	100.0
	2022	23.0	32.4	0.3	3.7	3.5	29.6	0.4	7.0	55.7	37.3	100.0
%	2023	22.3	32.7	0.6	3.7	3.5	29.7	0.5	7.0	55.6	37.5	100.0

# Heating & Plumbing Pipes - Czech Republic

SL .	Year	ľ	Metal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
Tons ו		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	<del></del>
es in	2019	998.4	2,688.0	6.4	230.4	224.4	629.2	42.9	436.7	3,692.8	1,126.9	5,256.4
Pipes	2020	934.4	2,532.6	6.4	227.0	222.7	596.2	40.7	420.2	3,473.4	1,086.6	4,980.2
_	2021	934.4	2,545.2	6.4	235.5	233.8	605.0	40.7	429.0	3,486.0	1,114.9	5,029.9
	2022	947.2	2,616.6	6.4	249.9	249.9	629.2	42.9	445.5	3,570.2	1,171.9	5,187.6
ge on Years	2023	960.0	2,700.6	12.8	264.4	265.2	649.0	44.0	460.9	3,673.4	1,222.6	5,356.9
% Change c Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-6.4	-5.8	0.0	-1.5	-0.8	-5.2	-5.1	-3.8	-5.9	-3.6	-5.3
% C	2021	0.0	0.5	0.0	3.8	5.0	1.5	0.0	2.1	0.4	2.6	1.0
o, U	2022	1.4	2.8	0.0	6.1	6.9	4.0	5.4	3.9	2.4	5.1	3.1
a)	2023	1.4	3.2	100.0	5.8	6.1	3.2	2.6	3.5	2.9	4.3	3.3
Share	2019	19.0	51.1	0.1	4.4	4.3	12.0	0.8	8.3	70.3	21.4	100.0
Market Sh	2020	18.8	50.9	0.1	4.6	4.5	12.0	0.8	8.4	69.7	21.8	100.0
	2021	18.6	50.6	0.1	4.7	4.7	12.0	0.8	8.5	69.3	22.2	100.0
	2022	18.3	50.4	0.1	4.8	4.8	12.1	8.0	8.6	68.8	22.6	100.0
%	2023	17.9	50.4	0.2	4.9	5.0	12.1	8.0	8.6	68.6	22.8	100.0

# 9.4 DNK - Denmark

# Floor Heating / Surface Heating & Cooling - Denmark

SL	Year	ı	Metal-Pip	oes		Plastic-F	Pipes		Multi	To	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
.= Se	2019	0.0	0.0	0.0	435.2	218.4	0.0	0.0	245.7	0.0	653.6	899.4
Pipes	2020	0.0	0.0	0.0	498.1	249.9	0.0	0.0	280.8	0.0	748.0	1,028.8
_	2021	0.0	0.0	0.0	521.9	261.8	0.0	0.0	293.8	0.0	783.7	1,077.5
	2022	0.0	0.0	0.0	544.0	273.7	0.0	0.0	306.8	0.0	817.7	1,124.5
Change on vious Years	2023	0.0	0.0	0.0	554.2	278.8	0.0	0.0	313.3	0.0	833.0	1,146.3
	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	_	_	_	14.5	14.4	_	_	35.1	_	14.4	19.4
% C	2021	-	-	-	4.8	4.8	-	-	23.7	-	4.8	9.3
o, U	2022	-	_	_	4.2	4.5	_	_	23.4	_	4.3	8.9
Φ	2023	-	-	-	1.9	1.9	-	-	20.7	-	1.9	6.4
Share	2019	0.0	0.0	0.0	48.4	24.3	0.0	0.0	27.3	0.0	72.7	100.0
Market	2020	0.0	0.0	0.0	48.4	24.3	0.0	0.0	27.3	0.0	72.7	100.0
	2021	0.0	0.0	0.0	48.4	24.3	0.0	0.0	27.3	0.0	72.7	100.0
	2022	0.0	0.0	0.0	48.4	24.3	0.0	0.0	27.3	0.0	72.7	100.0
%	2023	0.0	0.0	0.0	48.3	24.3	0.0	0.0	27.3	0.0	72.7	100.0

# **Radiator Connection - Denmark**

SL	Year	M	letal-Pip	es		Plastic-l	Pipes		Multi	To	tals	Total
Tons ו		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	966.4	403.2	0.0	67.2	11.9	0.0	0.0	332.8	1,369.6	79.1	1,781.4
Pipes	2020	1,062.4	445.2	0.0	74.0	12.8	0.0	0.0	366.6	1,507.6	86.7	1,960.9
_	2021	998.4	420.0	0.0	69.7	11.9	0.0	0.0	347.1	1,418.4	81.6	1,847.1
	2022	998.4	420.0	0.0	69.7	11.9	0.0	0.0	348.4	1,418.4	81.6	1,848.4
on ears	2023	940.8	394.8	0.0	66.3	11.9	0.0	0.0	328.9	1,335.6	78.2	1,742.7
监	2019	_	_	_	_	_	_	_	_	_	_	_
har ious	2020	9.9	10.4	_	10.1	7.1	_	_	30.2	10.1	9.7	13.3
% Change Previous Y	2021	-6.0	-5.7	-	-5.7	-6.7	-	-	11.9	-5.9	-5.9	-3.0
۰, ۳	2022	0.0	0.0	_	0.0	0.0	_	-	18.6	0.0	0.0	3.0
Φ	2023	-5.8	-6.0	-	-4.9	0.0	-	-	11.6	-5.8	-4.2	-2.9
Share	2019	54.2	22.6	0.0	3.8	0.7	0.0	0.0	18.7	76.9	4.4	100.0
Market Sh	2020	54.2	22.7	0.0	3.8	0.7	0.0	0.0	18.7	76.9	4.4	100.0
	2021	54.1	22.7	0.0	3.8	0.6	0.0	0.0	18.8	76.8	4.4	100.0
	2022	54.0	22.7	0.0	3.8	0.6	0.0	0.0	18.8	76.7	4.4	100.0
%	2023	54.0	22.7	0.0	3.8	0.7	0.0	0.0	18.9	76.6	4.5	100.0

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# Sanitary / Hot & Cold Water Systems - Denmark

SL	Year	N	/letal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es ::	2019	313.6	210.0	377.6	248.2	25.5	0.0	6.6	413.4	901.2	280.3	1,594.9
Pipes	2020	281.6	189.0	428.8	281.4	28.9	0.0	7.7	464.1	899.4	318.0	1,681.4
_	2021	249.6	168.0	422.4	278.0	28.0	0.0	7.7	455.0	840.0	313.7	1,608.7
	2022	224.0	151.2	428.8	284.8	28.9	0.0	7.7	461.5	804.0	321.3	1,586.9
ge on Years	2023	192.0	130.2	422.4	283.9	28.9	0.0	7.7	458.9	744.6	320.5	1,524.0
% Change o Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-10.2	-10.0	13.6	13.4	13.3	_	16.7	32.7	-0.2	13.4	9.8
	2021	-11.4	-11.1	-1.5	-1.2	-2.9	-	0.0	15.9	-6.6	-1.3	-0.1
o,	2022	-10.3	-10.0	1.5	2.4	3.0	-	0.0	19.9	-4.3	2.4	3.1
υ	2023	-14.3	-13.9	-1.5	-0.3	0.0	-	0.0	17.5	-7.4	-0.3	0.5
Share	2019	19.7	13.2	23.7	15.6	1.6	0.0	0.4	25.9	56.5	17.6	100.0
Market Sh	2020	16.7	11.2	25.5	16.7	1.7	0.0	0.5	27.6	53.5	18.9	100.0
	2021	15.5	10.4	26.3	17.3	1.7	0.0	0.5	28.3	52.2	19.5	100.0
Š	2022	14.1	9.5	27.0	17.9	1.8	0.0	0.5	29.1	50.7	20.3	100.0
%	2023	12.6	8.5	27.7	18.6	1.9	0.0	0.5	30.1	48.9	21.0	100.0

# Heating & Plumbing Pipes - Denmark

SL	Year	M	letal-Pipe	es		Plastic-	Pipes		Multi	To	tals	Total
Tons ו		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	1,280.0	613.2	377.6	750.6	255.9	0.0	6.6	839.3	2,270.8	1,013.0	4,123.1
Pipes	2020	1,344.0	634.2	428.8	853.4	291.6	0.0	7.7	940.5	2,407.0	1,152.7	4,500.2
_	2021	1,248.0	588.0	422.4	869.6	301.8	0.0	7.7	927.3	2,258.4	1,179.0	4,364.7
	2022	1,222.4	571.2	428.8	898.5	314.5	0.0	7.7	944.9	2,222.4	1,220.7	4,388.0
ge on Years	2023	1,132.8	525.0	422.4	904.4	319.6	0.0	7.7	931.7	2,080.2	1,231.7	4,243.6
% Change or Previous Yes	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	5.0	3.4	13.6	13.7	14.0	_	16.7	12.1	6.0	13.8	9.1
% C	2021	-7.1	-7.3	-1.5	1.9	3.5	-	0.0	-1.4	-6.2	2.3	-3.0
۰, ۳	2022	-2.1	-2.9	1.5	3.3	4.2	_	0.0	1.9	-1.6	3.5	0.5
a	2023	-7.3	-8.1	-1.5	0.7	1.6	-	0.0	-1.4	-6.4	0.9	-3.3
Share	2019	31.0	14.9	9.2	18.2	6.2	0.0	0.2	20.4	55.1	24.6	100.0
	2020	29.9	14.1	9.5	19.0	6.5	0.0	0.2	20.9	53.5	25.6	100.0
Market	2021	28.6	13.5	9.7	19.9	6.9	0.0	0.2	21.3	51.7	27.0	100.0
	2022	27.9	13.0	9.8	20.5	7.2	0.0	0.2	21.5	50.7	27.8	100.0
%	2023	26.7	12.4	10.0	21.3	7.5	0.0	0.2	22.0	49.0	29.0	100.0

# 9.5 FIN - Finland

# Floor Heating / Surface Heating & Cooling - Finland

Su	Year	ľ	Metal-Pip	oes		Plastic-F	Pipes		Multi	To	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es =:	2019	0.0	25.2	0.0	470.0	88.4	0.0	0.0	206.7	25.2	558.4	790.4
Pipes	2020	0.0	29.4	0.0	483.6	91.0	0.0	0.0	213.2	29.4	574.6	817.2
_	2021	0.0	29.4	0.0	492.2	92.6	0.0	0.0	217.1	29.4	584.8	831.3
	2022	0.0	29.4	0.0	506.6	95.2	0.0	0.0	223.6	29.4	601.8	854.8
ge on Years	2023	0.0	29.4	0.0	495.6	93.5	0.0	0.0	218.4	29.4	589.1	836.8
% Change or Previous Yes	2019	_	_	_	_	_	_	_	-	_	_	_
	2020	_	16.7	_	2.9	2.9	_	_	21.9	16.7	2.9	7.7
	2021	-	0.0	-	1.8	1.9	-	-	20.3	0.0	1.8	6.0
	2022	_	0.0	_	2.9	2.8	_	_	21.7	0.0	2.9	7.1
υ	2023	-	0.0	_	-2.2	-1.8	-	-	15.4	0.0	-2.1	2.0
Share	2019	0.0	3.2	0.0	59.5	11.2	0.0	0.0	26.2	3.2	70.7	100.0
Market	2020	0.0	3.6	0.0	59.2	11.1	0.0	0.0	26.1	3.6	70.3	100.0
	2021	0.0	3.5	0.0	59.2	11.1	0.0	0.0	26.1	3.5	70.3	100.0
	2022	0.0	3.4	0.0	59.3	11.1	0.0	0.0	26.2	3.4	70.4	100.0
%	2023	0.0	3.5	0.0	59.2	11.2	0.0	0.0	26.1	3.5	70.4	100.0

# Radiator Connection - Finland

SL	Year	M	letal-Pip	es		Plastic-l	Pipes		Multi	To	tals	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	1,561.6	672.0	0.0	84.2	4.2	0.0	0.0	149.5	2,233.6	88.4	2,471.5
Pipes	2020	1,484.8	642.6	0.0	79.9	4.2	0.0	0.0	143.0	2,127.4	84.1	2,354.6
_	2021	1,491.2	646.8	0.0	79.9	4.2	0.0	0.0	143.0	2,138.0	84.1	2,365.2
	2022	1,465.6	634.2	0.0	79.0	4.2	0.0	0.0	141.7	2,099.8	83.3	2,324.8
ge on Years	2023	1,331.2	575.4	0.0	71.4	3.4	0.0	0.0	128.7	1,906.6	74.8	2,110.1
% Change o	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-4.9	-4.4	-	-5.1	0.0	_	_	13.0	-4.8	-4.8	-3.8
% C	2021	0.4	0.7	-	0.0	0.0	-	-	18.2	0.5	0.0	1.4
o,	2022	-1.7	-1.9	-	-1.1	0.0	_	-	17.1	-1.8	-1.0	-0.8
υ	2023	-9.2	-9.3	-	-9.7	-20.0	-	-	7.3	-9.2	-10.2	-8.4
Share	2019	63.2	27.2	0.0	3.4	0.2	0.0	0.0	6.0	90.4	3.6	100.0
	2020	63.1	27.3	0.0	3.4	0.2	0.0	0.0	6.1	90.4	3.6	100.0
Market	2021	63.0	27.3	0.0	3.4	0.2	0.0	0.0	6.0	90.4	3.6	100.0
	2022	63.0	27.3	0.0	3.4	0.2	0.0	0.0	6.1	90.3	3.6	100.0
%	2023	63.1	27.3	0.0	3.4	0.2	0.0	0.0	6.1	90.4	3.5	100.0

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# Sanitary / Hot & Cold Water Systems - Finland

SL	Year	1	Metal-Pi <sub>l</sub>	oes		Plastic	-Pipes		Multi	To	tals	Total
Tons ר		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	0.0	558.6	140.8	239.7	2.6	0.0	4.4	436.8	699.4	246.6	1,382.9
Pipes	2020	0.0	541.8	134.4	232.0	2.6	0.0	4.4	422.5	676.2	239.0	1,337.7
_	2021	0.0	546.0	134.4	234.6	2.6	0.0	4.4	425.1	680.4	241.6	1,347.0
	2022	0.0	537.6	134.4	232.9	2.6	0.0	4.4	421.2	672.0	239.8	1,333.0
ears	2023	0.0	495.6	128.0	215.9	1.7	0.0	3.3	388.7	623.6	220.9	1,233.2
ge X	2019	_	_	_	_	_	_	_	_	_	_	_
% Change Previous Ye	2020	_	-3.0	-4.5	-3.2	0.0	_	0.0	14.3	-3.3	-3.1	1.7
	2021	-	8.0	0.0	1.1	0.0	-	0.0	18.9	0.6	1.1	5.8
۰, <del>Մ</del>	2022	-	-1.5	0.0	-0.7	0.0	_	0.0	17.1	-1.2	-0.7	4.0
υ	2023	-	-7.8	-4.8	-7.3	-33.3	-	-25.0	9.1	-7.2	-7.9	-2.8
Share	2019	0.0	40.4	10.2	17.3	0.2	0.0	0.3	31.6	50.6	17.8	100.0
Market	2020	0.0	40.5	10.0	17.3	0.2	0.0	0.3	31.6	50.5	17.9	100.0
	2021	0.0	40.5	10.0	17.4	0.2	0.0	0.3	31.6	50.5	17.9	100.0
	2022	0.0	40.3	10.1	17.5	0.2	0.0	0.3	31.6	50.4	18.0	100.0
%	2023	0.0	40.2	10.4	17.5	0.1	0.0	0.3	31.5	50.6	17.9	100.0

# Heating & Plumbing Pipes - Finland

SL	Year	M	letal-Pipe	es		Plastic	-Pipes		Multi	To	tals	Total
ר Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	1,561.6	1,255.8	140.8	793.9	95.2	0.0	4.4	671.0	2,958.2	893.5	4,522.7
Pip	2020	1,484.8	1,213.8	134.4	795.6	97.8	0.0	4.4	658.9	2,833.0	897.8	4,389.7
_	2021	1,491.2	1,222.2	134.4	806.7	99.5	0.0	4.4	664.4	2,847.8	910.5	4,422.7
	2022	1,465.6	1,201.2	134.4	818.6	102.0	0.0	4.4	665.5	2,801.2	925.0	4,391.7
on ears	2023	1,331.2	1,100.4	128.0	782.9	98.6	0.0	3.3	622.6	2,559.6	884.8	4,067.0
% Change or Previous Yes	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-4.9	-3.3	-4.6	0.2	2.7	_	0.0	-1.8	-4.2	0.5	-2.9
% C	2021	0.4	0.7	0.0	1.4	1.7	-	0.0	8.0	0.5	1.4	8.0
o,	2022	-1.7	-1.7	0.0	1.5	2.6	_	0.0	0.2	-1.6	1.6	-0.7
υ	2023	-9.2	-8.4	-4.8	-4.4	-3.3	-	-25.0	-6.5	-8.6	-4.4	-7.4
Share	2019	34.5	27.8	3.1	17.6	2.1	0.0	0.1	14.8	65.4	19.8	100.0
Market	2020	33.8	27.7	3.1	18.1	2.2	0.0	0.1	15.0	64.5	20.5	100.0
	2021	33.7	27.6	3.0	18.2	2.3	0.0	0.1	15.0	64.4	20.6	100.0
	2022	33.4	27.4	3.1	18.6	2.3	0.0	0.1	15.2	63.8	21.1	100.0
%	2023	32.7	27.1	3.2	19.3	2.4	0.0	0.1	15.3	62.9	21.8	100.0

# 9.6 FRA - France

# Floor Heating / Surface Heating & Cooling - France

SL	Year	ı	Metal-Pi <sub>l</sub>	oes		Plastic-	Pipes		Multi	To	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es :	2019	0.0	546.0	0.0	2,168.4	270.3	0.0	161.7	37.7	546.0	2,600.4	3,184.0
Pipes	2020	0.0	541.8	0.0	2,151.4	278.0	0.0	160.6	37.7	541.8	2,589.9	3,169.4
_	2021	0.0	546.0	0.0	2,149.6	279.6	0.0	160.6	39.0	546.0	2,589.9	3,174.9
	2022	0.0	592.2	0.0	2,327.3	312.8	0.0	174.9	42.9	592.2	2,815.0	3,450.1
ge on Years	2023	0.0	638.4	0.0	2,504.1	350.2	0.0	189.2	48.1	638.4	3,043.5	3,730.0
ıge s Ye	2019	_	_	_	_	_	_	_	_	_	_	
% Change Previous Ye	2020	_	-0.8	_	-0.8	2.8	_	-0.7	18.2	-0.8	-0.4	-0.3
	2021	-	8.0	-	-0.1	0.6	_	0.0	22.3	8.0	0.0	0.4
۰, <del>Մ</del>	2022	-	8.5	_	8.3	11.9	_	8.9	30.0	8.5	8.7	8.9
ø	2023	-	7.8	-	7.6	12.0	-	8.2	32.5	7.8	8.1	8.3
Share	2019	0.0	17.1	0.0	68.1	8.5	0.0	5.1	1.2	17.1	81.7	100.0
Market	2020	0.0	17.1	0.0	67.9	8.8	0.0	5.1	1.2	17.1	81.7	100.0
	2021	0.0	17.2	0.0	67.7	8.8	0.0	5.1	1.2	17.2	81.6	100.0
	2022	0.0	17.2	0.0	67.5	9.1	0.0	5.1	1.2	17.2	81.6	100.0
%	2023	0.0	17.1	0.0	67.1	9.4	0.0	5.1	1.3	17.1	81.6	100.0

# **Radiator Connection - France**

SL	Year	N	/letal-Pipe	s		Plastic-I	Pipes		Multi	Tot	als	Total
. Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	1,484.8	15,199.8	0.0	1,153.4	8.5	0.0	14.3	1,534.0	16,684.6	1,176.2	19,394.8
Pipes	2020	1,388.8	14,229.6	0.0	1,080.4	8.5	0.0	14.3	1,436.5	15,618.4	1,103.2	18,158.0
_	2021	1,356.8	13,910.4	0.0	1,055.7	7.6	0.0	13.2	1,404.0	15,267.2	1,076.6	17,747.8
	2022	1,331.2	13,641.6	0.0	1,035.3	7.6	0.0	13.2	1,376.7	14,972.8	1,056.2	17,405.6
ears	2023	1,337.6	13,708.8	0.0	1,040.4	7.6	0.0	13.2	1,383.2	15,046.4	1,061.3	17,490.9
6 Change o revious Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-6.5	-6.4	_	-6.3	0.0	_	0.0	10.7	-6.4	-6.2	-5.2
√° Ψ	2021	-2.3	-2.2	-	-2.3	-10.0	_	-7.7	15.5	-2.2	-2.4	-1.1
∘∕	2022	-1.9	-1.9	_	-1.9	0.0	_	0.0	15.9	-1.9	-1.9	-0.7
υ	2023	0.5	0.5	-	0.5	0.0	-	0.0	18.7	0.5	0.5	1.7
Share	2019	7.7	78.4	0.0	5.9	0.0	0.0	0.1	7.9	86.0	6.1	100.0
	2020	7.6	78.4	0.0	5.9	0.0	0.0	0.1	7.9	86.0	6.1	100.0
Market	2021	7.6	78.4	0.0	5.9	0.0	0.0	0.1	7.9	86.0	6.1	100.0
	2022	7.6	78.4	0.0	5.9	0.0	0.0	0.1	7.9	86.0	6.1	100.0
%	2023	7.6	78.4	0.0	5.9	0.0	0.0	0.1	7.9	86.0	6.1	100.0

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# Sanitary / Hot & Cold Water Systems - France

SL	Year		Metal-Pip	es		Plastic-f	Pipes		Multi	Tot	als	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
	2019	0.0	14,750.4	601.6	3,026.8	23.8	0.0	75.9	871.0	15,352.0	3,126.6	19,349.6
Pipes	2020	0.0	14,036.4	576.0	2,884.0	23.8	0.0	72.6	829.4	14,612.4	2,980.5	18,422.2
_	2021	0.0	13,742.4	563.2	2,826.2	23.0	0.0	70.4	812.5	14,305.6	2,919.6	18,037.7
	2022	0.0	13,494.6	550.4	2,777.0	23.0	0.0	69.3	798.2	14,045.0	2,869.2	17,712.4
Change on vious Years	2023	0.0	13,725.6	563.2	2,826.2	23.0	0.0	70.4	812.5	14,288.8	2,919.6	18,020.9
	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	_	-4.8	-4.3	-4.7	0.0	_	-4.3	12.5	-4.8	-4.7	-4.1
% C	2021	-	-2.1	-2.2	-2.0	-3.6	-	-3.0	15.8	-2.1	-2.0	-1.4
o, Ф	2022	-	-1.8	-2.3	-1.7	0.0	_	-1.6	16.1	-1.8	-1.7	-1.1
Φ	2023	-	1.7	2.3	1.8	0.0	-	1.6	20.3	1.7	1.8	2.5
Share	2019	0.0	76.2	3.1	15.6	0.1	0.0	0.4	4.5	79.3	16.2	100.0
	2020	0.0	76.2	3.1	15.7	0.1	0.0	0.4	4.5	79.3	16.2	100.0
Market	2021	0.0	76.2	3.1	15.7	0.1	0.0	0.4	4.5	79.3	16.2	100.0
	2022	0.0	76.2	3.1	15.7	0.1	0.0	0.4	4.5	79.3	16.2	100.0
%	2023	0.0	76.2	3.1	15.7	0.1	0.0	0.4	4.5	79.3	16.2	100.0

# Heating & Plumbing Pipes - France

Su	Year	N	/letal-Pipe	:S		Plastic-l	Pipes		Multi	Tot	als	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	1,484.8	30,496.2	601.6	6,348.7	302.6	0.0	251.9	2,066.9	32,582.6	6,903.2	41,552.7
Pipes	2020	1,388.8	28,807.8	576.0	6,115.8	310.3	0.0	247.5	1,949.2	30,772.6	6,673.5	39,395.3
_	2021	1,356.8	28,198.8	563.2	6,031.6	310.3	0.0	244.2	1,908.5	30,118.8	6,586.1	38,613.4
	2022	1,331.2	27,728.4	550.4	6,139.6	343.4	0.0	257.4	1,876.6	29,610.0	6,740.4	38,227.0
ge on Years	2023	1,337.6	28,072.8	563.2	6,370.8	380.8	0.0	272.8	1,898.6	29,973.6	7,024.4	38,896.6
% Change o	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-6.5	-5.5	-4.3	-3.7	2.5	_	-1.8	-5.7	-5.6	-3.3	-5.2
	2021	-2.3	-2.1	-2.2	-1.4	0.0	-	-1.3	-2.1	-2.1	-1.3	-2.0
o,	2022	-1.9	-1.7	-2.3	1.8	10.7	_	5.4	-1.7	-1.7	2.3	-1.0
Φ	2023	0.5	1.2	2.3	3.8	10.9	-	6.0	1.2	1.2	4.2	1.8
Share	2019	3.6	73.4	1.5	15.3	0.7	0.0	0.6	5.0	78.4	16.6	100.0
	2020	3.5	73.1	1.5	15.5	8.0	0.0	0.6	5.0	78.1	16.9	100.0
Market	2021	3.5	73.0	1.5	15.6	0.8	0.0	0.6	4.9	78.0	17.1	100.0
	2022	3.5	72.5	1.4	16.1	0.9	0.0	0.7	4.9	77.5	17.6	100.0
%	2023	3.4	72.2	1.5	16.4	1.0	0.0	0.7	4.9	77.1	18.1	100.0

## 9.7 DEU - Germany

## Floor Heating / Surface Heating & Cooling - Germany

SL	Year	ı	Metal-Pip	oes		Plastic-F	Pipes		Multi	То	tals	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	0.0	1,894.2	0.0	5,890.5	8,098.8	0.0	590.7	1,722.5	1,894.2	14,580.0	18,196.7
Pipes	2020	0.0	1,902.6	0.0	5,893.9	8,296.8	0.0	577.5	1,745.9	1,902.6	14,768.2	18,416.8
_	2021	0.0	1,902.6	0.0	5,896.5	8,307.1	0.0	577.5	1,747.2	1,902.6	14,781.0	18,430.8
	2022	0.0	1,995.0	0.0	6,189.7	8,728.6	0.0	606.1	1,834.3	1,995.0	15,524.4	19,353.7
% Change on Previous Years	2023	0.0	2,028.6	0.0	6,304.4	8,892.7	0.0	618.2	1,868.1	2,028.6	15,815.4	19,712.0
	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	0.4	_	0.1	2.4	_	-2.2	19.8	0.4	1.3	2.7
re C	2021	-	0.0	-	0.0	0.1	-	0.0	18.3	0.0	0.1	1.6
o, T	2022	-	4.9	_	5.0	5.1	_	5.0	24.1	4.9	5.0	6.6
Φ	2023	-	1.7	-	1.9	1.9	-	2.0	20.4	1.7	1.9	3.4
Share	2019	0.0	10.4	0.0	32.4	44.5	0.0	3.2	9.5	10.4	80.1	100.0
	2020	0.0	10.3	0.0	32.0	45.1	0.0	3.1	9.5	10.3	80.2	100.0
Market	2021	0.0	10.3	0.0	32.0	45.1	0.0	3.1	9.5	10.3	80.2	100.0
	2022	0.0	10.3	0.0	32.0	45.1	0.0	3.1	9.5	10.3	80.2	100.0
%	2023	0.0	10.3	0.0	32.0	45.1	0.0	3.1	9.5	10.3	80.2	100.0

## Radiator Connection - Germany

us.	Year	N	letal-Pipes	6		Plastic-	Pipes		Multi	Tot	als	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	10,432.0	10,563.0	0.0	79.0	9.4	0.0	38.5	2,835.3	20,995.0	126.9	23,957.2
Pip	2020	10,432.0	10,563.0	0.0	79.0	9.4	0.0	38.5	2,835.3	20,995.0	126.9	23,957.2
_	2021	10,284.8	10,416.0	0.0	77.4	9.4	0.0	38.5	2,795.0	20,700.8	125.2	23,621.0
	2022	10,348.8	10,483.2	0.0	78.2	9.4	0.0	38.5	2,813.2	20,832.0	126.0	23,771.2
on ears	2023	9,862.4	9,987.6	0.0	74.8	8.5	0.0	36.3	2,681.9	19,850.0	119.6	22,651.5
6 Change c revious Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	0.0	0.0	_	0.0	0.0	_	0.0	18.2	0.0	0.0	1.9
√° Ψ	2021	-1.4	-1.4	-	-2.2	0.0	-	0.0	16.5	-1.4	-1.3	0.4
∘∕ ⊔	2022	0.6	0.6	_	1.1	0.0	-	0.0	19.0	0.6	0.7	2.5
υ	2023	-4.7	-4.7	-	-4.3	-9.1	-	-5.7	12.7	-4.7	-5.1	-2.9
Share	2019	43.5	44.1	0.0	0.3	0.0	0.0	0.2	11.8	87.6	0.5	100.0
	2020	43.5	44.1	0.0	0.3	0.0	0.0	0.2	11.8	87.6	0.5	100.0
Market	2021	43.5	44.1	0.0	0.3	0.0	0.0	0.2	11.8	87.6	0.5	100.0
	2022	43.5	44.1	0.0	0.3	0.0	0.0	0.2	11.8	87.6	0.5	100.0
%	2023	43.5	44.1	0.0	0.3	0.0	0.0	0.2	11.8	87.6	0.5	100.0

### Sanitary / Hot & Cold Water Systems - Germany

SL	Year		Metal-Pi	oes		Plastic-	Pipes		Multi	Tot	als	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es =:	2019	0.0	15,254.4	16,230.4	482.0	133.5	0.0	173.8	10,439.0	31,484.8	789.2	42,713.0
Pipes	2020	0.0	15,330.0	16,313.6	484.5	134.3	0.0	174.9	10,492.3	31,643.6	793.7	42,929.6
_	2021	0.0	15,330.0	16,313.6	484.5	134.3	0.0	174.9	10,492.3	31,643.6	793.7	42,929.6
	2022	0.0	15,548.4	16,550.4	491.3	136.0	0.0	177.1	10,644.4	32,098.8	804.4	43,547.6
e on ears	2023	0.0	15,552.6	16,550.4	491.3	136.0	0.0	177.1	10,645.7	32,103.0	804.4	43,553.1
% Change c Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	0.5	0.5	0.5	0.6	_	0.6	18.8	0.5	0.6	4.4
re C	2021	-	0.0	0.0	0.0	0.0	-	0.0	18.2	0.0	0.0	3.9
o,	2022	-	1.4	1.5	1.4	1.3	_	1.3	19.9	1.4	1.3	5.4
ω	2023	-	0.0	0.0	0.0	0.0	-	0.0	18.2	0.0	0.0	3.9
Share	2019	0.0	35.7	38.0	1.1	0.3	0.0	0.4	24.4	73.7	1.8	100.0
	2020	0.0	35.7	38.0	1.1	0.3	0.0	0.4	24.4	73.7	1.8	100.0
Market	2021	0.0	35.7	38.0	1.1	0.3	0.0	0.4	24.4	73.7	1.8	100.0
	2022	0.0	35.7	38.0	1.1	0.3	0.0	0.4	24.4	73.7	1.8	100.0
%	2023	0.0	35.7	38.0	1.1	0.3	0.0	0.4	24.4	73.7	1.8	100.0

## Heating & Plumbing Pipes - Germany

SL	Year	N	/letal-Pipe	es .		Plastic-F	Pipes		Multi	Tot	tals	Total
. Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	10,432.0	27,711.6	16,230.4	6,451.5	8,241.6	0.0	803.0	12,689.6	54,374.0	15,496.1	82,559.7
Pipes	2020	10,432.0	27,795.6	16,313.6	6,457.5	8,440.5	0.0	790.9	12,754.5	54,541.2	15,688.9	82,984.6
_	2021	10,284.8	27,648.6	16,313.6	6,458.3	8,450.7	0.0	790.9	12,721.5	54,247.0	15,699.9	82,668.4
	2022	10,348.8	28,026.6	16,550.4	6,759.2	8,874.0	0.0	821.7	12,939.3	54,925.8	16,454.9	84,320.0
ge on Years	2023	9,862.4	27,568.8	16,550.4	6,870.6	9,037.2	0.0	831.6	12,857.9	53,981.6	16,739.4	83,578.9
% Change or Previous Yes	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	0.0	0.3	0.5	0.1	2.4	_	-1.5	0.5	0.3	1.2	0.5
% C	2021	-1.4	-0.5	0.0	0.0	0.1	-	0.0	-0.3	-0.5	0.1	-0.4
o,	2022	0.6	1.4	1.5	4.7	5.0	_	3.9	1.7	1.3	4.8	2.0
Φ	2023	-4.7	-1.6	0.0	1.7	1.8	-	1.2	-0.6	-1.7	1.7	-0.9
Share	2019	12.6	33.6	19.7	7.8	10.0	0.0	1.0	15.4	65.9	18.8	100.0
	2020	12.6	33.5	19.7	7.8	10.2	0.0	1.0	15.4	65.7	18.9	100.0
Market	2021	12.4	33.5	19.7	7.8	10.2	0.0	1.0	15.4	65.6	19.0	100.0
	2022	12.3	33.2	19.6	8.0	10.5	0.0	1.0	15.4	65.1	19.5	100.0
%	2023	11.8	33.0	19.8	8.2	10.8	0.0	1.0	15.4	64.6	20.0	100.0

### 9.8 GBR - Great Britain

## Floor Heating / Surface Heating & Cooling - Great Britain

SL	Year	ı	Metal-Pi <sub>l</sub>	oes		Plastic-	Pipes		Multi	To	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es :	2019	0.0	71.4	0.0	846.6	28.0	0.0	834.9	288.6	71.4	1,709.6	2,069.5
Pipes	2020	0.0	58.8	0.0	677.4	22.1	0.0	668.8	231.4	58.8	1,368.4	1,658.6
_	2021	0.0	71.4	0.0	844.9	28.0	0.0	833.8	288.6	71.4	1,706.8	2,066.8
	2022	0.0	75.6	0.0	925.6	31.4	0.0	913.0	315.9	75.6	1,870.1	2,261.6
ge on Years	2023	0.0	84.0	0.0	982.6	33.2	0.0	969.1	335.4	84.0	1,984.8	2,404.2
۰ س	2019	_	_	_	_	_	_	_	_	_	_	
% Change Previous Ye	2020	-	-17.6	-	-20.0	-21.2	_	-19.9	-5.2	-17.6	-20.0	-18.1
	2021	-	21.4	-	24.7	26.9	-	24.7	47.4	21.4	24.7	27.3
۰, ۳	2022	-	5.9	_	9.6	12.1	_	9.5	29.4	5.9	9.6	11.8
υ	2023	-	11.1	-	6.2	5.4	-	6.1	25.5	11.1	6.1	8.6
Share	2019	0.0	3.5	0.0	40.9	1.4	0.0	40.3	13.9	3.5	82.6	100.0
Market	2020	0.0	3.5	0.0	40.8	1.3	0.0	40.3	14.0	3.5	82.5	100.0
	2021	0.0	3.5	0.0	40.9	1.4	0.0	40.3	14.0	3.5	82.6	100.0
	2022	0.0	3.3	0.0	40.9	1.4	0.0	40.4	14.0	3.3	82.7	100.0
%	2023	0.0	3.5	0.0	40.9	1.4	0.0	40.3	14.0	3.5	82.6	100.0

### Radiator Connection - Great Britain

us.	Year	N	/letal-Pipe	s		Plastic-	Pipes		Multi	Tot	als	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	1,657.6	19,248.6	0.0	61.2	0.0	0.0	542.3	390.0	20,906.2	603.5	21,899.7
Pipes	2020	1,401.6	16,283.4	0.0	51.8	0.0	0.0	458.7	330.2	17,685.0	510.6	18,525.8
_	2021	1,510.4	17,581.2	0.0	56.1	0.0	0.0	495.0	357.5	19,091.6	551.1	20,000.2
	2022	1,548.8	18,018.0	0.0	57.8	0.0	0.0	507.1	366.6	19,566.8	564.9	20,498.3
on ears	2023	1,548.8	18,009.6	0.0	57.8	0.0	0.0	507.1	366.6	19,558.4	564.9	20,489.9
% Change o	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-15.4	-15.4	_	-15.3	_	_	-15.4	0.1	-15.4	-15.4	-15.2
% C	2021	7.8	8.0	-	8.2	-	-	7.9	28.0	8.0	7.9	8.3
۰, ۳	2022	2.5	2.5	_	3.0	_	_	2.4	21.2	2.5	2.5	2.8
υ	2023	0.0	0.0	-	0.0	_	-	0.0	18.2	0.0	0.0	0.2
Share	2019	7.6	87.9	0.0	0.3	0.0	0.0	2.5	1.8	95.5	2.8	100.0
	2020	7.6	87.9	0.0	0.3	0.0	0.0	2.5	1.8	95.5	2.8	100.0
Market	2021	7.6	87.9	0.0	0.3	0.0	0.0	2.5	1.8	95.5	2.8	100.0
	2022	7.6	87.9	0.0	0.3	0.0	0.0	2.5	1.8	95.5	2.8	100.0
%	2023	7.6	87.9	0.0	0.3	0.0	0.0	2.5	1.8	95.5	2.8	100.0

### Sanitary / Hot & Cold Water Systems - Great Britain

Su	Year	ı	Metal-Pipe	es		Plastic	-Pipes		Multi	Tot	als	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es :	2019	793.6	19,895.4	390.4	257.6	0.0	0.0	1,392.6	642.2	21,079.4	1,650.2	23,371.7
Pipes	2020	678.4	17,144.4	332.8	221.8	0.0	0.0	1,200.1	552.5	18,155.6	1,421.9	20,130.0
_	2021	729.6	18,576.6	364.8	240.6	0.0	0.0	1,300.2	599.3	19,671.0	1,540.8	21,811.0
	2022	742.4	19,042.8	371.2	246.5	0.0	0.0	1,332.1	614.9	20,156.4	1,578.6	22,349.9
on ears	2023	736.0	19,080.6	377.6	246.5	0.0	0.0	1,335.4	616.2	20,194.2	1,581.9	22,392.3
影	2019	_	_	_	_	_	-	_	_	_	_	_
% Change Previous Ye	2020	-14.5	-13.8	-14.8	-13.9	_	_	-13.8	1.7	-13.9	-13.8	-13.5
	2021	7.5	8.4	9.6	8.4	-	_	8.3	28.2	8.3	8.4	8.8
۰\ <u>۳</u>	2022	1.8	2.5	1.8	2.5	-	_	2.5	21.3	2.5	2.5	2.9
ø	2023	-0.9	0.2	1.7	0.0	-	-	0.2	18.4	0.2	0.2	0.6
Share	2019	3.4	85.1	1.7	1.1	0.0	0.0	6.0	2.7	90.2	7.1	100.0
Market	2020	3.4	85.2	1.7	1.1	0.0	0.0	6.0	2.7	90.2	7.1	100.0
	2021	3.3	85.2	1.7	1.1	0.0	0.0	6.0	2.7	90.2	7.1	100.0
	2022	3.3	85.2	1.7	1.1	0.0	0.0	6.0	2.8	90.2	7.1	100.0
%	2023	3.3	85.2	1.7	1.1	0.0	0.0	6.0	2.8	90.2	7.1	100.0

## Heating & Plumbing Pipes - Great Britain

SL	Year	N	/letal-Pipe	s		Plastic-	Pipes		Multi	Tot	als	Total
Tons ו		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	2,451.2	39,215.4	390.4	1,165.4	28.1	0.0	2,769.8	1,117.6	42,057.0	3,963.2	47,137.8
Pipes	2020	2,080.0	33,486.6	332.8	951.2	22.1	0.0	2,327.6	942.7	35,899.4	3,300.9	40,143.0
_	2021	2,240.0	36,229.2	364.8	1,141.6	28.1	0.0	2,629.0	1,053.8	38,834.0	3,798.6	43,686.4
	2022	2,291.2	37,136.4	371.2	1,230.0	31.5	0.0	2,752.2	1,097.8	39,798.8	4,013.6	44,910.2
ge on Years	2023	2,284.8	37,174.2	377.6	1,286.9	33.2	0.0	2,811.6	1,115.4	39,836.6	4,131.7	45,083.7
% Change c Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-15.1	-14.6	-14.8	-18.4	-21.2	_	-16.0	-15.7	-14.6	-16.7	-14.8
% C	2021	7.7	8.2	9.6	20.0	26.9	-	13.0	11.8	8.2	15.1	8.8
o, Ф	2022	2.3	2.5	1.8	7.7	12.1	_	4.7	4.2	2.5	5.7	2.8
d)	2023	-0.3	0.1	1.7	4.6	5.4	-	2.2	1.6	0.1	2.9	0.4
Share	2019	5.2	83.2	0.8	2.5	0.1	0.0	5.9	2.4	89.2	8.4	100.0
	2020	5.2	83.4	8.0	2.4	0.1	0.0	5.8	2.4	89.4	8.2	100.0
Market	2021	5.1	82.9	8.0	2.6	0.1	0.0	6.0	2.4	88.9	8.7	100.0
	2022	5.1	82.7	8.0	2.7	0.1	0.0	6.1	2.4	88.6	8.9	100.0
%	2023	5.1	82.5	0.8	2.9	0.1	0.0	6.2	2.5	88.4	9.2	100.0

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## 9.9 HUN - Hungary

## Floor Heating / Surface Heating & Cooling - Hungary

Su	Year	ľ	Metal-Pip	oes		Plastic-F	Pipes		Multi	To	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
	2019	0.0	0.0	0.0	76.5	39.9	37.4	0.0	45.5	0.0	153.8	199.4
Pipes	2020	0.0	0.0	0.0	94.4	50.2	46.2	0.0	55.9	0.0	190.7	246.6
_	2021	0.0	0.0	0.0	99.4	52.7	48.4	0.0	58.5	0.0	200.5	259.0
	2022	0.0	0.0	0.0	85.8	45.9	41.8	0.0	50.7	0.0	173.6	224.2
ge on Years	2023	0.0	0.0	0.0	107.1	57.0	52.8	0.0	63.7	0.0	216.8	280.6
	2019	_	_	_	_	_	_	_	_	_	_	_
% Change Previous Ye	2020	-	_	_	23.3	25.5	23.5	_	45.2	_	24.0	28.2
	2021	-	-	-	5.4	5.1	4.8	-	23.7	-	5.2	8.8
o,	2022	_	_	_	-13.7	-12.9	-13.6	_	2.4	_	-13.5	-10.3
a	2023	-	-	_	24.8	24.1	26.3	-	48.5	-	24.9	29.6
Share	2019	0.0	0.0	0.0	38.4	20.0	18.8	0.0	22.8	0.0	77.2	100.0
Market Sh	2020	0.0	0.0	0.0	38.3	20.3	18.7	0.0	22.7	0.0	77.3	100.0
	2021	0.0	0.0	0.0	38.4	20.3	18.7	0.0	22.6	0.0	77.4	100.0
	2022	0.0	0.0	0.0	38.3	20.5	18.6	0.0	22.6	0.0	77.4	100.0
%	2023	0.0	0.0	0.0	38.2	20.3	18.8	0.0	22.7	0.0	77.3	100.0

## Radiator Connection - Hungary

SL	Year	N	Metal-Pip	es		Plastic-l	Pipes		Multi	Tot	tals	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	409.6	478.8	0.0	32.3	28.9	17.6	0.0	300.3	888.4	78.8	1,267.5
Pipes	2020	448.0	525.0	0.0	35.7	32.3	17.6	0.0	330.2	973.0	85.6	1,388.8
_	2021	441.6	516.6	0.0	34.8	31.4	17.6	0.0	325.0	958.2	83.9	1,367.1
	2022	422.4	504.0	0.0	34.0	29.7	17.6	0.0	313.3	926.4	81.4	1,321.1
on ears	2023	467.2	554.4	0.0	37.4	33.2	19.8	0.0	347.1	1,021.6	90.4	1,459.0
% Change o	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	9.4	9.6	_	10.5	11.8	0.0	_	29.9	9.5	8.6	13.7
% C	2021	-1.4	-1.6	_	-2.4	-2.6	0.0	_	16.3	-1.5	-2.0	2.2
o, П	2022	-4.3	-2.4	_	-2.4	-5.4	0.0	_	13.9	-3.3	-3.0	0.3
υ	2023	10.6	10.0	-	10.0	11.4	12.5	-	30.9	10.3	11.1	14.6
Share	2019	32.3	37.8	0.0	2.5	2.3	1.4	0.0	23.7	70.1	6.2	100.0
	2020	32.3	37.8	0.0	2.6	2.3	1.3	0.0	23.8	70.1	6.2	100.0
Market	2021	32.3	37.8	0.0	2.5	2.3	1.3	0.0	23.8	70.1	6.1	100.0
	2022	32.0	38.2	0.0	2.6	2.3	1.3	0.0	23.7	70.1	6.2	100.0
%	2023	32.0	38.0	0.0	2.6	2.3	1.4	0.0	23.8	70.0	6.2	100.0

### Sanitary / Hot & Cold Water Systems - Hungary

SL .	Year	N	Лetal-Рір	es		Plastic-l	Pipes		Multi	To	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es ::	2019	147.2	352.8	0.0	45.1	6.8	125.4	0.0	331.5	500.0	177.2	1,008.7
Pipes	2020	153.6	411.6	0.0	51.8	7.6	147.4	0.0	380.9	565.2	206.9	1,153.0
_	2021	147.2	399.0	0.0	50.2	7.6	143.0	0.0	370.5	546.2	200.8	1,117.5
	2022	134.4	373.8	0.0	46.8	6.8	132.0	0.0	345.8	508.2	185.6	1,039.6
ge on Years	2023	147.2	441.0	0.0	54.4	7.6	151.8	0.0	406.9	588.2	213.8	1,208.9
% Change c Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	4.3	16.7	_	15.1	12.5	17.5	_	35.8	13.0	16.7	20.4
	2021	-4.2	-3.1	_	-3.3	0.0	-3.0	-	15.0	-3.4	-2.9	2.1
o, U	2022	-8.7	-6.3	_	-6.8	-11.1	-7.7	_	10.3	-7.0	-7.6	-2.0
υ	2023	9.5	18.0	-	16.4	12.5	15.0	-	39.1	15.7	15.3	22.6
Share	2019	14.6	35.0	0.0	4.5	0.7	12.4	0.0	32.9	49.6	17.6	100.0
Market	2020	13.3	35.7	0.0	4.5	0.7	12.8	0.0	33.0	49.0	17.9	100.0
	2021	13.2	35.7	0.0	4.5	0.7	12.8	0.0	33.2	48.9	18.0	100.0
	2022	12.9	36.0	0.0	4.5	0.7	12.7	0.0	33.3	48.9	17.8	100.0
%	2023	12.2	36.5	0.0	4.5	0.6	12.6	0.0	33.7	48.7	17.7	100.0

## Heating & Plumbing Pipes - Hungary

SL	Year	N	Лetal-Рір	es		Plastic-I	Pipes		Multi	To	tals	Total
Tons ו		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	556.8	831.6	0.0	153.9	75.7	180.4	0.0	573.1	1,388.4	409.9	2,371.4
Pipes	2020	601.6	936.6	0.0	181.9	90.1	211.2	0.0	649.0	1,538.2	483.2	2,670.4
_	2021	588.8	915.6	0.0	184.5	91.8	209.0	0.0	638.0	1,504.4	485.3	2,627.7
	2022	556.8	877.8	0.0	166.6	82.5	191.4	0.0	600.6	1,434.6	440.5	2,475.7
on ears	2023	614.4	995.4	0.0	198.9	97.8	224.4	0.0	691.9	1,609.8	521.1	2,822.8
发	2019	_	_	_	_	_	_	_	_	_	_	_
6 Change revious Ye	2020	8.1	12.6	_	18.2	19.1	17.1	_	13.2	10.8	17.9	12.6
√° Ψ	2021	-2.1	-2.2	-	1.4	1.9	-1.0	-	-1.7	-2.2	0.4	-1.6
∘∕	2022	-5.4	-4.1	-	-9.7	-10.2	-8.4	_	-5.9	-4.6	-9.2	-5.8
αJ	2023	10.3	13.4	-	19.4	18.6	17.2	-	15.2	12.2	18.3	14.0
Share	2019	23.5	35.1	0.0	6.5	3.2	7.6	0.0	24.2	58.6	17.3	100.0
	2020	22.5	35.1	0.0	6.8	3.4	7.9	0.0	24.3	57.6	18.1	100.0
Market	2021	22.4	34.8	0.0	7.0	3.5	8.0	0.0	24.3	57.3	18.5	100.0
	2022	22.5	35.5	0.0	6.7	3.3	7.7	0.0	24.3	58.0	17.8	100.0
%	2023	21.8	35.3	0.0	7.1	3.5	8.0	0.0	24.5	57.0	18.5	100.0

### 9.10 IRL - Ireland

## Floor Heating / Surface Heating & Cooling - Ireland

SL.	Year	ı	Metal-Pip	oes		Plastic	-Pipes		Multi	To	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
.= Se	2019	0.0	0.0	0.0	148.8	125.8	0.0	9.9	156.0	0.0	284.4	440.4
Pipes	2020	0.0	0.0	0.0	140.2	119.0	0.0	9.9	146.9	0.0	269.2	416.0
_	2021	0.0	0.0	0.0	137.7	116.4	0.0	8.8	144.3	0.0	263.0	407.3
	2022	0.0	0.0	0.0	161.5	136.0	0.0	9.9	169.0	0.0	307.4	476.4
ge on Years	2023	0.0	0.0	0.0	183.6	153.8	0.0	11.0	191.1	0.0	348.5	539.6
% Change o	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	_	_	-5.7	-5.4	_	0.0	11.3	_	-5.4	-0.1
	2021	-	-	-	-1.8	-2.1	-	-11.1	16.1	-	-2.3	3.5
o,	2022	-	_	_	17.3	16.8	-	12.5	38.4	-	16.9	23.7
υ	2023	-	-	-	13.7	13.1	-	11.1	33.6	-	13.4	19.8
Share	2019	0.0	0.0	0.0	33.8	28.6	0.0	2.2	35.4	0.0	64.6	100.0
	2020	0.0	0.0	0.0	33.7	28.6	0.0	2.4	35.3	0.0	64.7	100.0
Market	2021	0.0	0.0	0.0	33.8	28.6	0.0	2.2	35.4	0.0	64.6	100.0
	2022	0.0	0.0	0.0	33.9	28.5	0.0	2.1	35.5	0.0	64.5	100.0
%	2023	0.0	0.0	0.0	34.0	28.5	0.0	2.0	35.4	0.0	64.6	100.0

### Radiator Connection - Ireland

SL	Year	N	Metal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
Tons ו		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	198.4	1,163.4	0.0	81.6	4.2	0.0	38.5	247.0	1,361.8	124.4	1,733.2
Pipe	2020	185.6	1,096.2	0.0	77.4	3.4	0.0	36.3	232.7	1,281.8	117.0	1,631.6
_	2021	179.2	1,029.0	0.0	72.2	3.4	0.0	34.1	218.4	1,208.2	109.8	1,536.4
	2022	198.4	1,155.0	0.0	81.6	3.4	0.0	38.5	245.7	1,353.4	123.5	1,722.6
on ears	2023	198.4	1,260.0	0.0	89.2	3.4	0.0	41.8	269.1	1,458.4	134.4	1,862.0
ᄣᅩ	2019	_	_	_	_	_	_	_	_	_	_	_
har ious	2020	-6.5	-5.8	_	-5.2	-20.0	_	-5.7	11.3	-5.9	-5.9	-3.8
% Change Previous Y	2021	-3.4	-6.1	-	-6.6	0.0	-	-6.1	10.9	-5.7	-6.2	-3.7
۰, ۳	2022	10.7	12.2	_	12.9	0.0	_	12.9	33.0	12.0	12.5	14.6
Φ	2023	0.0	9.1	-	9.4	0.0	-	8.6	29.4	7.8	8.9	10.5
Share	2019	11.4	67.1	0.0	4.7	0.2	0.0	2.2	14.3	78.6	7.2	100.0
Market	2020	11.4	67.2	0.0	4.7	0.2	0.0	2.2	14.3	78.6	7.2	100.0
	2021	11.7	67.0	0.0	4.7	0.2	0.0	2.2	14.2	78.6	7.1	100.0
	2022	11.5	67.0	0.0	4.7	0.2	0.0	2.2	14.3	78.6	7.2	100.0
%	2023	10.7	67.7	0.0	4.8	0.2	0.0	2.2	14.5	78.3	7.2	100.0

### Sanitary / Hot & Cold Water Systems - Ireland

SL.	Year	I	Metal-Pip	oes		Plastic-	Pipes		Multi	To	tals	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	0.0	1,205.4	0.0	134.3	0.0	33.0	39.6	182.0	1,205.4	206.9	1,594.3
Pipes	2020	0.0	1,163.4	0.0	129.2	0.0	30.8	38.5	175.5	1,163.4	198.5	1,537.4
_	2021	0.0	1,104.6	0.0	123.2	0.0	28.6	36.3	166.4	1,104.6	188.2	1,459.1
	2022	0.0	1,281.0	0.0	142.8	0.0	33.0	41.8	192.4	1,281.0	217.6	1,691.0
ge on Years	2023	0.0	1,419.6	0.0	158.1	0.0	37.4	46.2	213.2	1,419.6	241.7	1,874.5
% Change c Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	-3.5	_	-3.8	_	-6.7	-2.8	14.0	-3.5	-4.1	-1.8
	2021	-	-5.1	-	-4.6	-	-7.1	-5.7	12.1	-5.1	-5.2	-3.4
o,	2022	-	16.0	_	15.9	_	15.4	15.2	36.6	16.0	15.7	18.0
υ	2023	-	10.8	-	10.7	-	13.3	10.5	31.0	10.8	11.1	12.8
Share	2019	0.0	75.6	0.0	8.4	0.0	2.1	2.5	11.4	75.6	13.0	100.0
Market	2020	0.0	75.7	0.0	8.4	0.0	2.0	2.5	11.4	75.7	12.9	100.0
	2021	0.0	75.7	0.0	8.4	0.0	2.0	2.5	11.4	75.7	12.9	100.0
	2022	0.0	75.8	0.0	8.4	0.0	2.0	2.5	11.4	75.8	12.9	100.0
%	2023	0.0	75.7	0.0	8.4	0.0	2.0	2.5	11.4	75.7	12.9	100.0

## Heating & Plumbing Pipes - Ireland

SL	Year	ľ	Metal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
ר Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	198.4	2,368.8	0.0	364.7	130.1	33.0	88.0	495.0	2,567.2	615.7	3,677.9
Pipes	2020	185.6	2,259.6	0.0	346.8	122.4	30.8	84.7	469.7	2,445.2	584.7	3,499.6
_	2021	179.2	2,133.6	0.0	333.2	119.9	28.6	79.2	447.7	2,312.8	560.9	3,321.4
	2022	198.4	2,436.0	0.0	385.9	139.4	33.0	90.2	513.7	2,634.4	648.5	3,796.6
ge on Years	2023	198.4	2,679.6	0.0	431.0	157.3	37.4	99.0	569.8	2,878.0	724.6	4,172.4
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-6.5	-4.6	_	-4.9	-5.9	-6.7	-3.8	-5.1	-4.8	-5.0	-4.9
	2021	-3.5	-5.6	-	-3.9	-2.1	-7.1	-6.5	-4.7	-5.4	-4.1	-5.1
o,	2022	10.7	14.2	_	15.8	16.3	15.4	13.9	14.7	13.9	15.6	14.3
Φ	2023	0.0	10.0	-	11.7	12.8	13.3	9.8	10.9	9.3	11.7	9.9
Share	2019	5.4	64.4	0.0	9.9	3.5	0.9	2.4	13.5	69.8	16.7	100.0
Market	2020	5.3	64.6	0.0	9.9	3.5	0.9	2.4	13.4	69.9	16.7	100.0
	2021	5.4	64.2	0.0	10.0	3.6	0.9	2.4	13.5	69.6	16.9	100.0
	2022	5.2	64.2	0.0	10.2	3.7	0.9	2.4	13.5	69.4	17.1	100.0
%	2023	4.8	64.2	0.0	10.3	3.8	0.9	2.4	13.7	69.0	17.4	100.0

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## 9.11 ITA - Italy

## Floor Heating / Surface Heating & Cooling - Italy

SL	Year	ı	Metal-Pi <sub>l</sub>	oes		Plastic-	Pipes		Multi	To	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
.= Se	2019	0.0	46.2	0.0	567.8	391.8	0.0	16.5	299.0	46.2	976.2	1,321.4
Pipes	2020	0.0	42.0	0.0	553.4	381.7	0.0	16.5	291.2	42.0	951.5	1,284.7
_	2021	0.0	42.0	0.0	568.6	391.8	0.0	16.5	300.3	42.0	977.0	1,319.3
	2022	0.0	46.2	0.0	614.6	423.3	0.0	17.6	325.0	46.2	1,055.4	1,426.6
ge on Years	2023	0.0	46.2	0.0	625.6	431.0	0.0	18.7	330.2	46.2	1,075.3	1,451.6
% Change c Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	-9.1	_	-2.5	-2.6	_	0.0	15.1	-9.1	-2.5	0.7
% C	2021	-	0.0	-	2.8	2.7	-	0.0	21.9	0.0	2.7	6.4
۰, <sub>۳</sub>	2022	-	10.0	_	8.1	8.0	_	6.7	27.9	10.0	8.0	12.1
Φ	2023	-	0.0	-	1.8	1.8	-	6.2	20.1	0.0	1.9	5.4
Share	2019	0.0	3.5	0.0	43.0	29.7	0.0	1.2	22.6	3.5	73.9	100.0
Market	2020	0.0	3.3	0.0	43.1	29.7	0.0	1.3	22.7	3.3	74.1	100.0
	2021	0.0	3.2	0.0	43.1	29.7	0.0	1.3	22.8	3.2	74.1	100.0
	2022	0.0	3.2	0.0	43.1	29.7	0.0	1.2	22.8	3.2	74.0	100.0
%	2023	0.0	3.2	0.0	43.1	29.7	0.0	1.3	22.7	3.2	74.1	100.0

## Radiator Connection - Italy

us.	Year	M	letal-Pipe	es		Plastic-	Pipes		Multi	Tot	als	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	2,848.0	9,458.4	0.0	126.6	8.5	92.4	11.0	1,302.6	12,306.4	238.6	13,847.6
Pip	2020	2,784.0	9,198.0	0.0	123.2	8.5	90.2	11.0	1,285.7	11,982.0	233.0	13,500.6
_	2021	2,771.2	9,114.0	0.0	123.2	8.5	90.2	11.0	1,293.5	11,885.2	233.0	13,411.6
	2022	2,848.0	9,336.6	0.0	126.6	8.5	92.4	11.0	1,341.6	12,184.6	238.6	13,764.8
on ears	2023	2,854.4	9,307.2	0.0	126.6	8.5	92.4	11.0	1,357.2	12,161.6	238.6	13,757.4
% Change c Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-2.2	-2.8	_	-2.7	0.0	-2.4	0.0	16.6	-2.6	-2.3	-1.1
% C	2021	-0.5	-0.9	-	0.0	0.0	0.0	0.0	18.9	-0.8	0.0	8.0
o,	2022	2.8	2.4	_	2.8	0.0	2.4	0.0	22.6	2.5	2.4	4.2
(I)	2023	0.2	-0.3	_	0.0	0.0	0.0	0.0	19.6	-0.2	0.0	1.5
Share	2019	20.6	68.3	0.0	0.9	0.1	0.7	0.1	9.4	88.9	1.7	100.0
	2020	20.6	68.1	0.0	0.9	0.1	0.7	0.1	9.5	88.8	1.7	100.0
Market	2021	20.7	68.0	0.0	0.9	0.1	0.7	0.1	9.6	88.6	1.7	100.0
	2022	20.7	67.8	0.0	0.9	0.1	0.7	0.1	9.7	88.5	1.7	100.0
%	2023	20.7	67.7	0.0	0.9	0.1	0.7	0.1	9.9	88.4	1.7	100.0

### Sanitary / Hot & Cold Water Systems - Italy

SL	Year	ľ	Metal-Pip	es		Plastic	-Pipes		Multi	To	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es :	2019	422.4	2,797.2	480.0	279.6	12.8	1,254.0	83.6	3,237.0	3,699.6	1,630.0	8,566.6
Pipes	2020	396.8	2,746.8	473.6	275.4	12.8	1,229.8	82.5	3,177.2	3,617.2	1,600.4	8,394.8
_	2021	384.0	2,757.3	473.6	277.1	12.8	1,234.2	82.5	3,188.9	3,614.9	1,606.6	8,410.4
	2022	377.6	2,843.4	492.8	286.4	13.6	1,271.6	85.8	3,286.4	3,713.8	1,657.4	8,657.6
ge on Years	2023	364.8	2,872.8	499.2	289.8	13.6	1,282.6	85.8	3,316.3	3,736.8	1,671.8	8,724.9
% Change c Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-6.1	-1.8	-1.3	-1.5	0.0	-1.9	-1.3	16.0	-2.2	-1.8	4.0
% C	2021	-3.2	0.4	0.0	0.6	0.0	0.4	0.0	18.6	-0.1	0.4	6.4
o,	2022	-1.7	3.1	4.1	3.4	6.7	3.0	4.0	21.8	2.7	3.2	9.3
Φ	2023	-3.4	1.0	1.3	1.2	0.0	0.9	0.0	19.3	0.6	0.9	7.0
Share	2019	4.9	32.7	5.6	3.3	0.1	14.6	1.0	37.8	43.2	19.0	100.0
Market Sh	2020	4.7	32.7	5.6	3.3	0.2	14.6	1.0	37.8	43.1	19.1	100.0
	2021	4.6	32.8	5.6	3.3	0.2	14.7	1.0	37.9	43.0	19.1	100.0
	2022	4.4	32.8	5.7	3.3	0.2	14.7	1.0	38.0	42.9	19.1	100.0
%	2023	4.2	32.9	5.7	3.3	0.2	14.7	1.0	38.0	42.8	19.2	100.0

## Heating & Plumbing Pipes - Italy

Su	Year	N	/letal-Pipe	s		Plastic-	Pipes		Multi	Tot	als	Total
Tons ו		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	3,270.4	12,301.8	480.0	974.1	413.1	1,346.4	111.1	4,094.2	16,052.2	2,844.7	22,991.1
Pipes	2020	3,180.8	11,986.8	473.6	952.0	402.9	1,320.0	110.0	4,022.7	15,641.2	2,784.9	22,448.8
_	2021	3,155.2	11,913.3	473.6	969.0	413.1	1,324.4	110.0	4,046.9	15,542.1	2,816.5	22,405.5
	2022	3,225.6	12,226.2	492.8	1,027.7	445.4	1,364.0	114.4	4,191.0	15,944.6	2,951.5	23,087.1
ge on Years	2023	3,219.2	12,226.2	499.2	1,042.1	453.1	1,375.0	115.5	4,233.9	15,944.6	2,985.7	23,164.2
% Change or Previous Yes	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-2.7	-2.6	-1.3	-2.3	-2.5	-2.0	-1.0	-1.8	-2.6	-2.1	-2.4
% C Prev	2021	-0.8	-0.6	0.0	1.8	2.5	0.3	0.0	0.6	-0.6	1.1	-0.2
o,	2022	2.2	2.6	4.1	6.1	7.8	3.0	4.0	3.6	2.6	4.8	3.0
d)	2023	-0.2	0.0	1.3	1.4	1.7	0.8	1.0	1.0	0.0	1.2	0.3
Share	2019	14.2	53.5	2.1	4.2	1.8	5.9	0.5	17.8	69.8	12.4	100.0
	2020	14.2	53.4	2.1	4.2	1.8	5.9	0.5	17.9	69.7	12.4	100.0
Market	2021	14.1	53.2	2.1	4.3	1.8	5.9	0.5	18.1	69.4	12.6	100.0
	2022	14.0	53.0	2.1	4.5	1.9	5.9	0.5	18.2	69.1	12.8	100.0
%	2023	13.9	52.8	2.2	4.5	2.0	5.9	0.5	18.3	68.8	12.9	100.0

### 9.12 NLD - Netherlands

## Floor Heating / Surface Heating & Cooling - Netherlands

SL	Year	ı	Metal-Pip	oes		Plastic-F	Pipes		Multi	To	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es ::	2019	0.0	12.6	0.0	311.1	1,624.4	0.0	5.5	421.2	12.6	1,941.0	2,374.8
Pipes	2020	0.0	12.6	0.0	295.0	1,537.6	0.0	5.5	399.1	12.6	1,838.1	2,249.8
_	2021	0.0	12.6	0.0	312.0	1,626.9	0.0	5.5	421.2	12.6	1,944.4	2,378.2
	2022	0.0	12.6	0.0	324.7	1,694.9	0.0	5.5	439.4	12.6	2,025.1	2,477.1
ge on Years	2023	0.0	12.6	0.0	332.4	1,734.8	0.0	5.5	449.8	12.6	2,072.7	2,535.1
% Change o Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	0.0	_	-5.2	-5.3	_	0.0	12.0	0.0	-5.3	-2.6
% C	2021	-	0.0	-	5.8	5.8	-	0.0	24.7	0.0	5.8	8.7
o,	2022	-	0.0	_	4.1	4.2	_	0.0	23.3	0.0	4.2	7.1
Φ	2023	-	0.0	-	2.4	2.4	-	0.0	21.0	0.0	2.4	5.2
Share	2019	0.0	0.5	0.0	13.1	68.4	0.0	0.2	17.7	0.5	81.7	100.0
Market	2020	0.0	0.6	0.0	13.1	68.3	0.0	0.2	17.7	0.6	81.7	100.0
	2021	0.0	0.5	0.0	13.1	68.4	0.0	0.2	17.7	0.5	81.8	100.0
	2022	0.0	0.5	0.0	13.1	68.4	0.0	0.2	17.7	0.5	81.8	100.0
%	2023	0.0	0.5	0.0	13.1	68.4	0.0	0.2	17.7	0.5	81.8	100.0

### **Radiator Connection - Netherlands**

SL	Year	M	letal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	1,760.0	478.8	0.0	130.0	212.5	0.0	36.3	2,003.3	2,238.8	378.8	4,621.0
Pipes	2020	1,638.4	445.2	0.0	120.7	197.2	0.0	33.0	1,860.3	2,083.6	350.9	4,294.8
_	2021	1,657.6	453.6	0.0	122.4	199.8	0.0	34.1	1,885.0	2,111.2	356.2	4,352.4
	2022	1,664.0	453.6	0.0	123.2	200.6	0.0	34.1	1,895.4	2,117.6	358.0	4,371.0
on ears	2023	1,644.8	449.4	0.0	121.6	198.0	0.0	34.1	1,877.2	2,094.2	353.7	4,325.1
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-6.9	-7.0	_	-7.2	-7.2	_	-9.1	9.7	-6.9	-7.4	-0.4
% C	2021	1.2	1.9	_	1.4	1.3	-	3.3	19.8	1.3	1.5	8.6
o, П	2022	0.4	0.0	_	0.7	0.4	_	0.0	18.8	0.3	0.5	7.6
Φ	2023	-1.2	-0.9	-	-1.4	-1.3	-	0.0	17.0	-1.1	-1.2	6.0
Share	2019	38.1	10.4	0.0	2.8	4.6	0.0	0.8	43.4	48.4	8.2	100.0
Market	2020	38.1	10.4	0.0	2.8	4.6	0.0	0.8	43.3	48.5	8.2	100.0
	2021	38.1	10.4	0.0	2.8	4.6	0.0	0.8	43.3	48.5	8.2	100.0
	2022	38.1	10.4	0.0	2.8	4.6	0.0	0.8	43.4	48.4	8.2	100.0
%	2023	38.0	10.4	0.0	2.8	4.6	0.0	8.0	43.4	48.4	8.2	100.0

### Sanitary / Hot & Cold Water Systems - Netherlands

SL .	Year	I	Metal-Pip	oes		Plastic-	Pipes		Multi	To	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es =:	2019	0.0	3,859.8	108.8	112.2	142.0	0.0	81.4	1,739.4	3,968.6	335.5	6,043.5
Pipes	2020	0.0	3,658.2	102.4	106.2	134.3	0.0	77.0	1,648.4	3,760.6	317.6	5,726.6
_	2021	0.0	3,792.6	108.8	110.5	139.4	0.0	80.3	1,709.5	3,901.4	330.2	5,941.1
	2022	0.0	3,893.4	108.8	113.9	142.8	0.0	81.4	1,753.7	4,002.2	338.1	6,094.0
ge on Years	2023	0.0	3,964.8	115.2	116.4	145.4	0.0	82.5	1,786.2	4,080.0	344.3	6,210.5
% Change c Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-	-5.2	-5.9	-5.3	-5.4	_	-5.4	12.0	-5.2	-5.4	-0.9
% C	2021	-	3.7	6.2	4.0	3.8	-	4.3	22.6	3.7	4.0	8.6
o, U	2022	-	2.7	0.0	3.1	2.4	_	1.4	21.2	2.6	2.4	7.3
υ	2023	-	1.8	5.9	2.2	1.8	-	1.4	20.4	1.9	1.8	6.6
Share	2019	0.0	63.9	1.8	1.9	2.3	0.0	1.3	28.8	65.7	5.6	100.0
	2020	0.0	63.9	1.8	1.9	2.3	0.0	1.3	28.8	65.7	5.5	100.0
Market	2021	0.0	63.8	1.8	1.9	2.3	0.0	1.4	28.8	65.7	5.6	100.0
	2022	0.0	63.9	1.8	1.9	2.3	0.0	1.3	28.8	65.7	5.5	100.0
%	2023	0.0	63.8	1.9	1.9	2.3	0.0	1.3	28.8	65.7	5.5	100.0

## Heating & Plumbing Pipes - Netherlands

SL	Year	N	letal-Pipe	es		Plastic-	Pipes		Multi	To	tals	Total
Tons ר		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	1,760.0	4,351.2	108.8	553.4	1,978.8	0.0	123.2	3,523.3	6,220.0	2,655.4	12,398.7
Pip	2020	1,638.4	4,116.0	102.4	521.9	1,869.2	0.0	115.5	3,306.6	5,856.8	2,506.6	11,670.0
_	2021	1,657.6	4,258.8	108.8	544.9	1,966.1	0.0	119.9	3,397.9	6,025.2	2,630.8	12,053.9
	2022	1,664.0	4,359.6	108.8	561.9	2,038.3	0.0	121.0	3,459.5	6,132.4	2,721.2	12,313.1
ge on Years	2023	1,644.8	4,426.8	115.2	570.4	2,078.3	0.0	122.1	3,480.4	6,186.8	2,770.7	12,437.9
% Change o	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-6.9	-5.4	-5.9	-5.7	-5.5	_	-6.3	-6.2	-5.8	-5.6	-5.9
% C	2021	1.2	3.5	6.3	4.4	5.2	_	3.8	2.8	2.9	5.0	3.3
٥, ٣	2022	0.4	2.4	0.0	3.1	3.7	_	0.9	1.8	1.8	3.4	2.2
Φ	2023	-1.2	1.5	5.9	1.5	2.0	-	0.9	0.6	0.9	1.8	1.0
Share	2019	14.2	35.1	0.9	4.5	16.0	0.0	1.0	28.4	50.2	21.4	100.0
Market	2020	14.0	35.3	0.9	4.5	16.0	0.0	1.0	28.3	50.2	21.5	100.0
	2021	13.8	35.3	0.9	4.5	16.3	0.0	1.0	28.2	50.0	21.8	100.0
	2022	13.5	35.4	0.9	4.6	16.6	0.0	1.0	28.1	49.8	22.1	100.0
%	2023	13.2	35.6	0.9	4.6	16.7	0.0	1.0	28.0	49.7	22.3	100.0

## 9.13 NOR - Norway

## Floor Heating / Surface Heating & Cooling - Norway

SL	Year	ľ	Metal-Pip	oes		Plastic-F	Pipes		Multi	To	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es ::	2019	0.0	33.6	0.0	285.6	130.0	0.0	0.0	145.6	33.6	415.6	594.8
Pipes	2020	0.0	33.6	0.0	289.0	131.8	0.0	0.0	148.2	33.6	420.8	602.6
_	2021	0.0	37.8	0.0	305.2	139.4	0.0	0.0	156.0	37.8	444.6	638.4
	2022	0.0	37.8	0.0	313.6	142.8	0.0	0.0	159.9	37.8	456.4	654.2
ge on Years	2023	0.0	37.8	0.0	312.0	142.0	0.0	0.0	158.6	37.8	453.9	650.3
% Change c Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-	0.0	_	1.2	1.3	_	_	20.3	0.0	1.2	5.3
	2021	-	12.5	-	5.6	5.8	-	-	24.4	12.5	5.7	10.1
o,	2022	-	0.0	_	2.8	2.4	_	_	21.1	0.0	2.7	6.5
Φ	2023	-	0.0	-	-0.5	-0.6	-	-	17.2	0.0	-0.6	3.3
Share	2019	0.0	5.6	0.0	48.0	21.9	0.0	0.0	24.5	5.6	69.9	100.0
Market	2020	0.0	5.6	0.0	48.0	21.9	0.0	0.0	24.6	5.6	69.8	100.0
	2021	0.0	5.9	0.0	47.8	21.8	0.0	0.0	24.4	5.9	69.6	100.0
	2022	0.0	5.8	0.0	47.9	21.8	0.0	0.0	24.4	5.8	69.8	100.0
%	2023	0.0	5.8	0.0	48.0	21.8	0.0	0.0	24.4	5.8	69.8	100.0

## Radiator Connection - Norway

SL	Year	M	letal-Pip	es		Plastic-F	Pipes		Multi	To	tals	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	1,318.4	693.0	0.0	105.4	6.8	0.0	0.0	139.1	2,011.4	112.2	2,262.7
Pipes	2020	1,299.2	680.4	0.0	103.7	6.8	0.0	0.0	137.8	1,979.6	110.5	2,227.9
_	2021	1,318.4	693.0	0.0	105.4	6.8	0.0	0.0	139.1	2,011.4	112.2	2,262.7
	2022	1,286.4	676.2	0.0	102.8	6.8	0.0	0.0	135.2	1,962.6	109.6	2,207.4
ge on Years	2023	1,267.2	667.8	0.0	101.1	6.8	0.0	0.0	132.6	1,935.0	108.0	2,175.6
% Change c Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-1.5	-1.8	_	-1.6	0.0	_	_	17.1	-1.6	-1.5	-0.6
% C	2021	1.5	1.9	-	1.6	0.0	-	-	19.3	1.6	1.5	2.5
۰, <del>Մ</del>	2022	-2.4	-2.4	_	-2.4	0.0	_	_	14.9	-2.4	-2.3	-1.5
Φ	2023	-1.5	-1.2	-	-1.7	0.0	-	-	15.9	-1.4	-1.6	-0.5
Share	2019	58.3	30.6	0.0	4.7	0.3	0.0	0.0	6.1	88.9	5.0	100.0
	2020	58.3	30.5	0.0	4.7	0.3	0.0	0.0	6.2	88.9	5.0	100.0
Market	2021	58.3	30.6	0.0	4.7	0.3	0.0	0.0	6.1	88.9	5.0	100.0
	2022	58.3	30.6	0.0	4.7	0.3	0.0	0.0	6.1	88.9	5.0	100.0
%	2023	58.2	30.7	0.0	4.6	0.3	0.0	0.0	6.1	88.9	5.0	100.0

## Sanitary / Hot & Cold Water Systems - Norway

SU	Year	N	Лetal-Рір	es		Plastic-l	Pipes		Multi	To	tals	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	153.6	1,155.0	320.0	284.8	0.0	0.0	0.0	119.6	1,628.6	284.8	2,033.0
Pipes	2020	147.2	1,146.6	320.0	282.2	0.0	0.0	0.0	119.6	1,613.8	282.2	2,015.6
_	2021	147.2	1,184.4	332.8	291.6	0.0	0.0	0.0	123.5	1,664.4	291.6	2,079.4
	2022	140.8	1,171.8	326.4	288.2	0.0	0.0	0.0	122.2	1,639.0	288.2	2,049.4
on ars	2023	134.4	1,167.6	326.4	288.2	0.0	0.0	0.0	122.2	1,628.4	288.2	2,038.8
% Change on Previous Years	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-4.2	-0.7	0.0	-0.9	_	_	_	18.2	-0.9	-0.9	0.1
% C	2021	0.0	3.3	4.0	3.3	-	-	-	22.0	3.1	3.3	4.1
o,	2022	-4.3	-1.1	-1.9	-1.2	_	_	_	16.9	-1.5	-1.2	-0.5
υ	2023	-4.5	-0.4	0.0	0.0	-	-	-	18.2	-0.6	0.0	0.4
Share	2019	7.6	56.8	15.7	14.0	0.0	0.0	0.0	5.9	80.1	14.0	100.0
Market	2020	7.3	56.9	15.9	14.0	0.0	0.0	0.0	5.9	80.1	14.0	100.0
	2021	7.1	57.0	16.0	14.0	0.0	0.0	0.0	5.9	80.0	14.0	100.0
	2022	6.9	57.2	15.9	14.1	0.0	0.0	0.0	6.0	80.0	14.1	100.0
%	2023	6.6	57.3	16.0	14.1	0.0	0.0	0.0	6.0	79.9	14.1	100.0

## Heating & Plumbing Pipes - Norway

SU	Year	M	letal-Pipe	es		Plastic-F	Pipes		Multi	To	tals	Total
Tons ו		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	1,472.0	1,881.6	320.0	675.8	136.9	0.0	0.0	342.1	3,673.6	812.6	4,828.3
Pip	2020	1,446.4	1,860.6	320.0	674.9	138.6	0.0	0.0	343.2	3,627.0	813.5	4,783.7
_	2021	1,465.6	1,915.2	332.8	702.1	146.2	0.0	0.0	354.2	3,713.6	848.3	4,916.1
	2022	1,427.2	1,885.8	326.4	704.7	149.6	0.0	0.0	353.1	3,639.4	854.3	4,846.8
ge on Years	2023	1,401.6	1,873.2	326.4	701.3	148.8	0.0	0.0	349.8	3,601.2	850.0	4,801.0
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-1.7	-1.1	0.0	-0.1	1.2	_	_	0.3	-1.3	0.1	-0.9
% C	2021	1.3	2.9	4.0	4.0	5.5	-	-	3.2	2.4	4.3	2.8
۰, ۳	2022	-2.6	-1.5	-1.9	0.4	2.3	_	_	-0.3	-2.0	0.7	-1.4
Φ	2023	-1.8	-0.7	0.0	-0.5	-0.6	-	-	-0.9	-1.1	-0.5	-0.9
Share	2019	30.5	39.0	6.6	14.0	2.8	0.0	0.0	7.1	76.1	16.8	100.0
Market	2020	30.2	38.9	6.7	14.1	2.9	0.0	0.0	7.2	75.8	17.0	100.0
	2021	29.8	39.0	6.8	14.3	3.0	0.0	0.0	7.2	75.5	17.3	100.0
	2022	29.5	38.9	6.7	14.5	3.1	0.0	0.0	7.3	75.1	17.6	100.0
%	2023	29.2	39.0	6.8	14.6	3.1	0.0	0.0	7.3	75.0	17.7	100.0

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## 9.14 POL - Poland

## Floor Heating / Surface Heating & Cooling - Poland

SL	Year	ľ	Metal-Pip	oes		Plastic-F	Pipes		Multi	To	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
	2019	0.0	336.0	0.0	247.4	652.0	0.0	0.0	214.5	336.0	899.3	1,449.8
Pipes	2020	0.0	403.2	0.0	296.7	791.4	0.0	0.0	244.4	403.2	1,088.0	1,735.6
_	2021	0.0	424.2	0.0	312.0	835.6	0.0	0.0	250.9	424.2	1,147.5	1,822.6
	2022	0.0	428.4	0.0	317.0	850.8	0.0	0.0	253.5	428.4	1,167.9	1,849.8
on	2023	0.0	453.6	0.0	335.8	904.4	0.0	0.0	261.3	453.6	1,240.2	1,955.0
eg ≺	2019	_	_	_	_	_	_	_	_	_	_	_
% Chan; Previous	2020	_	20.0	_	19.9	21.4	_	_	34.7	20.0	21.0	22.5
% C	2021	-	5.2	-	5.2	5.6	-	_	21.3	5.2	5.5	7.3
o,	2022	-	1.0	_	1.6	1.8	-	-	19.4	1.0	1.8	3.7
Φ	2023	-	5.9	-	5.9	6.3	-	-	21.8	5.9	6.2	8.0
Share	2019	0.0	23.2	0.0	17.1	45.0	0.0	0.0	14.8	23.2	62.0	100.0
Market	2020	0.0	23.2	0.0	17.1	45.6	0.0	0.0	14.1	23.2	62.7	100.0
	2021	0.0	23.3	0.0	17.1	45.8	0.0	0.0	13.8	23.3	63.0	100.0
	2022	0.0	23.2	0.0	17.1	46.0	0.0	0.0	13.7	23.2	63.1	100.0
%	2023	0.0	23.2	0.0	17.2	46.3	0.0	0.0	13.4	23.2	63.4	100.0

### Radiator Connection - Poland

us.	Year	N	letal-Pipe	es		Plastic-	Pipes		Multi	Tot	als	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	5,542.4	5,002.2	0.0	136.0	43.4	413.6	20.9	1,222.0	10,544.6	613.8	12,380.4
Pip	2020	5,824.0	5,254.2	0.0	142.0	46.8	435.6	22.0	1,284.4	11,078.2	646.3	13,008.9
_	2021	5,772.8	5,203.8	0.0	140.2	46.8	431.2	22.0	1,272.7	10,976.6	640.2	12,889.5
	2022	5,760.0	5,195.4	0.0	140.2	46.8	431.2	22.0	1,270.1	10,955.4	640.2	12,865.7
% Change on Previous Years	2023	5,644.8	5,090.4	0.0	136.8	45.9	422.4	20.9	1,244.1	10,735.2	626.0	12,605.4
	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	5.1	5.0	_	4.4	7.8	5.3	5.3	24.2	5.1	5.3	6.7
% C	2021	-0.9	-1.0	-	-1.2	0.0	-1.0	0.0	17.1	-0.9	-0.9	0.6
o,	2022	-0.2	-0.2	_	0.0	0.0	0.0	0.0	17.9	-0.2	0.0	1.4
Φ	2023	-2.0	-2.0	-	-2.4	-1.8	-2.0	-5.0	15.8	-2.0	-2.2	-0.5
Share	2019	44.8	40.4	0.0	1.1	0.4	3.3	0.2	9.9	85.2	5.0	100.0
	2020	44.8	40.4	0.0	1.1	0.4	3.3	0.2	9.9	85.2	5.0	100.0
Market	2021	44.8	40.4	0.0	1.1	0.4	3.3	0.2	9.9	85.2	5.0	100.0
	2022	44.8	40.4	0.0	1.1	0.4	3.4	0.2	9.9	85.2	5.0	100.0
%	2023	44.8	40.4	0.0	1.1	0.4	3.4	0.2	9.9	85.2	5.0	100.0

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### Sanitary / Hot & Cold Water Systems - Poland

SL	Year	M	letal-Pipe	es		Plastic	-Pipes		Multi	To	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
	2019	1,561.6	4,153.8	76.8	346.0	67.2	1,883.2	37.4	1,146.6	5,792.2	2,333.7	9,272.5
Pipes	2020	1,612.8	4,447.8	83.2	368.0	74.0	2,030.6	40.7	1,231.1	6,143.8	2,513.3	9,888.2
_	2021	1,542.4	4,485.6	89.6	369.7	74.8	2,050.4	40.7	1,242.8	6,117.6	2,535.6	9,896.1
	2022	1,465.6	4,473.0	96.0	368.0	75.6	2,048.2	40.7	1,242.8	6,034.6	2,532.6	9,810.0
ge on Years	2023	1,433.6	4,515.0	102.4	370.6	76.5	2,068.0	40.7	1,255.8	6,051.0	2,555.8	9,862.6
Change c	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	3.3	7.1	8.3	6.4	10.1	7.8	8.8	26.9	6.1	7.7	8.7
% C	2021	-4.4	8.0	7.7	0.5	1.1	1.0	0.0	19.3	-0.4	0.9	2.0
o,	2022	-5.0	-0.3	7.1	-0.5	1.1	-0.1	0.0	18.2	-1.4	-0.1	1.1
υ	2023	-2.2	0.9	6.7	0.7	1.1	1.0	0.0	19.4	0.3	0.9	2.5
Share	2019	16.8	44.8	0.8	3.7	0.7	20.3	0.4	12.4	62.5	25.2	100.0
	2020	16.3	45.0	8.0	3.7	0.7	20.5	0.4	12.5	62.1	25.4	100.0
Market	2021	15.6	45.3	0.9	3.7	8.0	20.7	0.4	12.6	61.8	25.6	100.0
	2022	14.9	45.6	1.0	3.8	8.0	20.9	0.4	12.7	61.5	25.8	100.0
%	2023	14.5	45.8	1.0	3.8	8.0	21.0	0.4	12.7	61.4	25.9	100.0

## Heating & Plumbing Pipes - Poland

SU	Year	N	/letal-Pipe	s		Plastic	-Pipes		Multi	Tot	als	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es	2019	7,104.0	9,492.0	76.8	729.3	762.5	2,296.8	58.3	2,185.7	16,672.8	3,846.9	22,705.4
Pip	2020	7,436.8	10,105.2	83.2	806.7	912.1	2,466.2	62.7	2,335.3	17,625.2	4,247.6	24,208.1
_	2021	7,315.2	10,113.6	89.6	822.0	957.1	2,481.6	62.7	2,340.8	17,518.4	4,323.4	24,182.6
	2022	7,225.6	10,096.8	96.0	825.4	973.3	2,479.4	62.7	2,340.8	17,418.4	4,340.7	24,099.9
ge on Years	2023	7,078.4	10,059.0	102.4	843.2	1,026.8	2,490.4	61.6	2,336.4	17,239.8	4,422.0	23,998.2
% Change o	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	4.7	6.5	8.3	10.6	19.6	7.4	7.6	6.8	5.7	10.4	6.6
% C	2021	-1.6	0.1	7.7	1.9	4.9	0.6	0.0	0.2	-0.6	1.8	-0.1
۰, <del>۳</del>	2022	-1.2	-0.2	7.1	0.4	1.7	-0.1	0.0	0.0	-0.6	0.4	-0.3
υ	2023	-2.0	-0.4	6.7	2.2	5.5	0.4	-1.8	-0.2	-1.0	1.9	-0.4
Share	2019	31.3	41.8	0.3	3.2	3.4	10.1	0.3	9.6	73.4	16.9	100.0
	2020	30.7	41.7	0.3	3.3	3.8	10.2	0.3	9.7	72.8	17.6	100.0
Market	2021	30.3	41.8	0.4	3.4	4.0	10.3	0.3	9.7	72.4	17.9	100.0
	2022	30.0	41.9	0.4	3.4	4.0	10.3	0.3	9.7	72.3	18.0	100.0
%	2023	29.5	41.9	0.4	3.5	4.3	10.4	0.3	9.7	71.8	18.4	100.0

## 9.15 PRT - Portugal

## Floor Heating / Surface Heating & Cooling - Portugal

Su	Year	r	Metal-Pi <sub>l</sub>	oes		Plastic-	Pipes		Multi	To	tals	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	0.0	0.0	0.0	60.4	29.7	0.0	0.0	2.6	0.0	90.1	92.7
Pipes	2020	0.0	0.0	0.0	71.4	34.8	0.0	0.0	2.6	0.0	106.2	108.8
_	2021	0.0	0.0	0.0	87.6	42.5	0.0	0.0	3.9	0.0	130.0	134.0
	2022	0.0	0.0	0.0	88.4	42.5	0.0	0.0	3.9	0.0	130.9	134.8
ge on Years	2023	0.0	0.0	0.0	95.2	45.9	0.0	0.0	3.9	0.0	141.1	145.0
% Change c Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	_	_	18.3	17.1	_	_	18.2	_	17.9	17.9
	2021	-	-	-	22.6	22.0	-	_	77.3	-	22.4	23.5
o, Ф	2022	_	_	_	1.0	0.0	-	_	18.2	_	0.7	1.1
Φ	2023	-	-	-	7.7	8.0	-	-	18.2	-	7.8	8.0
Share	2019	0.0	0.0	0.0	65.1	32.1	0.0	0.0	2.8	0.0	97.2	100.0
	2020	0.0	0.0	0.0	65.6	32.0	0.0	0.0	2.4	0.0	97.6	100.0
Market	2021	0.0	0.0	0.0	65.4	31.7	0.0	0.0	2.9	0.0	97.1	100.0
	2022	0.0	0.0	0.0	65.6	31.5	0.0	0.0	2.9	0.0	97.1	100.0
%	2023	0.0	0.0	0.0	65.7	31.7	0.0	0.0	2.7	0.0	97.3	100.0

## Radiator Connection - Portugal

Su	Year	N	Лetal-Рір	es		Plastic-	Pipes		Multi	To	tals	Total
Tons ו		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	<del></del>
es in	2019	678.4	575.4	0.0	70.6	2.6	0.0	0.0	197.6	1,253.8	73.1	1,524.5
Pipes	2020	704.0	600.6	0.0	74.0	2.6	0.0	0.0	208.0	1,304.6	76.5	1,589.1
_	2021	729.6	617.4	0.0	75.6	2.6	0.0	0.0	214.5	1,347.0	78.2	1,639.7
	2022	729.6	617.4	0.0	75.6	2.6	0.0	0.0	214.5	1,347.0	78.2	1,639.7
on ears	2023	736.0	621.6	0.0	76.5	2.6	0.0	0.0	215.8	1,357.6	79.0	1,652.4
% Change c Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	3.8	4.4	_	4.8	0.0	_	_	24.4	4.1	4.7	6.4
	2021	3.6	2.8	-	2.3	0.0	-	-	21.9	3.3	2.2	5.3
۰, ۳	2022	0.0	0.0	_	0.0	0.0	_	-	18.2	0.0	0.0	2.1
Φ	2023	0.9	0.7	-	1.1	0.0	-	-	18.9	8.0	1.1	2.8
Share	2019	44.5	37.7	0.0	4.6	0.2	0.0	0.0	13.0	82.2	4.8	100.0
Market	2020	44.3	37.8	0.0	4.7	0.2	0.0	0.0	13.1	82.1	4.8	100.0
	2021	44.5	37.7	0.0	4.6	0.2	0.0	0.0	13.1	82.1	4.8	100.0
	2022	44.5	37.7	0.0	4.6	0.2	0.0	0.0	13.1	82.1	4.8	100.0
%	2023	44.5	37.6	0.0	4.6	0.2	0.0	0.0	13.1	82.2	4.8	100.0

### Sanitary / Hot & Cold Water Systems - Portugal

SU	Year	N	Лetal-Рір	es		Plastic-	Pipes		Multi	To	tals	Total
η Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	128.0	646.8	102.4	70.6	8.0	235.4	8.8	135.2	877.2	315.6	1,328.0
Pipes	2020	134.4	688.8	108.8	74.8	8.0	250.8	8.8	144.3	932.0	335.2	1,411.6
_	2021	134.4	722.4	115.2	79.0	8.0	266.2	9.9	152.1	972.0	356.0	1,480.1
	2022	128.0	726.6	115.2	79.9	8.0	268.4	9.9	152.1	969.8	359.0	1,480.9
se on Years	2023	128.0	739.2	115.2	81.6	8.0	275.0	9.9	154.7	982.4	367.3	1,504.4
% Change c Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	5.0	6.5	6.2	6.0	0.0	6.5	0.0	26.1	6.2	6.2	8.0
% C	2021	0.0	4.9	5.9	5.7	0.0	6.1	12.5	24.6	4.3	6.2	6.5
۰, ۳	2022	-4.8	0.6	0.0	1.1	0.0	8.0	0.0	18.2	-0.2	0.9	1.7
υ	2023	0.0	1.7	0.0	2.1	0.0	2.5	0.0	20.2	1.3	2.3	3.2
Share	2019	9.6	48.7	7.7	5.3	0.1	17.7	0.7	10.2	66.1	23.8	100.0
Market	2020	9.5	48.8	7.7	5.3	0.1	17.8	0.6	10.2	66.0	23.8	100.0
	2021	9.1	48.8	7.8	5.3	0.1	18.0	0.7	10.3	65.7	24.1	100.0
	2022	8.6	49.1	7.8	5.4	0.1	18.1	0.7	10.3	65.5	24.2	100.0
%	2023	8.5	49.1	7.7	5.4	0.1	18.3	0.7	10.3	65.3	24.4	100.0

## Heating & Plumbing Pipes - Portugal

SL	Year	N	Metal-Pip	es		Plastic-	Pipes		Multi	To	tals	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	806.4	1,222.2	102.4	201.5	33.2	235.4	8.8	283.8	2,131.0	478.8	2,893.6
Pipes	2020	838.4	1,289.4	108.8	220.2	38.3	250.8	8.8	300.3	2,236.6	518.0	3,054.9
_	2021	864.0	1,339.8	115.2	242.3	45.9	266.2	9.9	313.5	2,319.0	564.3	3,196.8
	2022	857.6	1,344.0	115.2	244.0	45.9	268.4	9.9	313.5	2,316.8	568.2	3,198.5
ge on Years	2023	864.0	1,360.8	115.2	253.3	49.3	275.0	9.9	316.8	2,340.0	587.5	3,244.3
% Change or Previous Yes	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	4.0	5.5	6.3	9.3	15.4	6.5	0.0	5.8	5.0	8.2	5.6
% C	2021	3.1	3.9	5.9	10.0	20.0	6.1	12.5	4.4	3.7	8.9	4.6
o,	2022	-0.7	0.3	0.0	0.7	0.0	0.8	0.0	0.0	-0.1	0.7	0.1
ω	2023	8.0	1.3	0.0	3.8	7.4	2.5	0.0	1.1	1.0	3.4	1.4
Share	2019	27.9	42.2	3.5	7.0	1.2	8.1	0.3	9.8	73.7	16.6	100.0
Market	2020	27.4	42.2	3.6	7.2	1.3	8.2	0.3	9.8	73.2	17.0	100.0
	2021	27.0	41.9	3.6	7.6	1.4	8.3	0.3	9.8	72.5	17.7	100.0
	2022	26.8	42.0	3.6	7.6	1.4	8.4	0.3	9.8	72.4	17.8	100.0
%	2023	26.6	41.9	3.6	7.8	1.5	8.5	0.3	9.8	72.1	18.1	100.0

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### 9.16 SVK - Slovakia

## Floor Heating / Surface Heating & Cooling - Slovakia

SL	Year	M	letal-Pip	es		Plastic-	Pipes		Multi	Tot	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es ::	2019	12.8	0.0	0.0	45.1	59.5	0.0	0.0	14.3	12.8	104.6	131.6
Pipes	2020	12.8	0.0	0.0	48.4	63.8	0.0	0.0	15.6	12.8	112.2	140.6
_	2021	6.4	0.0	0.0	51.8	68.0	0.0	0.0	16.9	6.4	119.8	143.2
	2022	6.4	0.0	0.0	55.2	73.1	0.0	0.0	18.2	6.4	128.4	153.0
on ears	2023	0.0	0.0	0.0	57.8	76.5	0.0	0.0	19.5	0.0	134.3	153.8
Ψ, >-	2019	_	_	_	_	_	_	_	_	_	_	_
% Change Previous Ye	2020	0.0	_	_	7.5	7.1	_	_	28.9	0.0	7.3	8.6
	2021	-50.0	-	-	7.0	6.7	-	-	28.0	-50.0	6.8	3.6
o,	2022	0.0	_	_	6.6	7.5	_	_	27.3	0.0	7.1	8.8
Φ	2023	-100.0	-	-	4.6	4.7	-	-	26.6	-100.0	4.6	2.4
Share	2019	9.7	0.0	0.0	34.2	45.2	0.0	0.0	10.9	9.7	79.4	100.0
Market Sh	2020	9.1	0.0	0.0	34.5	45.3	0.0	0.0	11.1	9.1	79.8	100.0
	2021	4.5	0.0	0.0	36.2	47.5	0.0	0.0	11.8	4.5	83.7	100.0
	2022	4.2	0.0	0.0	36.1	47.8	0.0	0.0	11.9	4.2	83.9	100.0
%	2023	0.0	0.0	0.0	37.6	49.7	0.0	0.0	12.7	0.0	87.3	100.0

### Radiator Connection - Slovakia

SL	Year	N	Metal-Pip	es		Plastic-l	Pipes		Multi	To	tals	Total
Tons ו		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	416.0	289.8	0.0	23.0	0.0	22.0	0.0	205.4	705.8	45.0	956.2
Pipes	2020	409.6	285.6	0.0	22.1	0.0	22.0	0.0	202.8	695.2	44.1	942.1
_	2021	403.2	281.4	0.0	22.1	0.0	22.0	0.0	201.5	684.6	44.1	930.2
	2022	403.2	281.4	0.0	22.1	0.0	22.0	0.0	202.8	684.6	44.1	931.5
on ears	2023	409.6	285.6	0.0	22.1	0.0	22.0	0.0	204.1	695.2	44.1	943.4
Change evious Ye	2019	14.0	15.0	_	12.5	_	11.1	_	35.3	14.4	11.8	18.2
% Change Previous Y	2020	-1.5	-1.4	_	-3.7	_	0.0	_	16.7	-1.5	-1.9	1.9
% C	2021	-1.6	-1.5	-	0.0	-	0.0	-	17.4	-1.5	0.0	2.1
∘∕ ⊡	2022	0.0	0.0	_	0.0	_	0.0	-	18.9	0.0	0.0	3.6
Φ	2023	1.6	1.5	-	0.0	-	0.0	-	18.9	1.5	0.0	4.8
Share	2019	43.5	30.3	0.0	2.4	0.0	2.3	0.0	21.5	73.8	4.7	100.0
	2020	43.5	30.3	0.0	2.3	0.0	2.3	0.0	21.5	73.8	4.7	100.0
Market	2021	43.3	30.3	0.0	2.4	0.0	2.4	0.0	21.7	73.6	4.7	100.0
	2022	43.3	30.2	0.0	2.4	0.0	2.4	0.0	21.8	73.5	4.7	100.0
%	2023	43.4	30.3	0.0	2.3	0.0	2.3	0.0	21.6	73.7	4.7	100.0

## Sanitary / Hot & Cold Water Systems - Slovakia

Su	Year	N	Лetal-Рір	es		Plastic-	Pipes		Multi	To	tals	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	224.0	243.6	0.0	26.4	20.4	253.0	7.7	122.2	467.6	307.4	897.2
Pipes	2020	217.6	243.6	0.0	26.4	20.4	255.2	7.7	124.8	461.2	309.6	895.6
_	2021	211.2	247.8	0.0	27.2	20.4	257.4	7.7	128.7	459.0	312.7	900.4
	2022	198.4	252.0	0.0	27.2	20.4	259.6	7.7	131.3	450.4	314.9	896.6
on ears	2023	192.0	256.2	0.0	28.0	20.4	264.0	7.7	132.6	448.2	320.2	901.0
% Change c Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-2.9	0.0	_	0.0	0.0	0.9	0.0	20.7	-1.4	0.7	2.0
	2021	-2.9	1.7	-	3.2	0.0	0.9	0.0	21.9	-0.5	1.0	2.7
o∕	2022	-6.1	1.7	_	0.0	0.0	0.9	0.0	20.6	-1.9	0.7	1.8
Φ	2023	-3.2	1.7	-	3.1	0.0	1.7	0.0	19.4	-0.5	1.7	2.8
Share	2019	25.0	27.1	0.0	2.9	2.3	28.2	0.9	13.6	52.1	34.3	100.0
Market	2020	24.3	27.2	0.0	2.9	2.3	28.5	0.9	13.9	51.5	34.6	100.0
	2021	23.5	27.5	0.0	3.0	2.3	28.6	0.9	14.3	51.0	34.7	100.0
	2022	22.1	28.1	0.0	3.0	2.3	29.0	0.9	14.6	50.2	35.1	100.0
%	2023	21.3	28.4	0.0	3.1	2.3	29.3	0.9	14.7	49.7	35.5	100.0

## Heating & Plumbing Pipes - Slovakia

su	Year	N	Лetal-Рір	es		Plastic-l	Pipes		Multi	To	tals	Total
Tons ו		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	652.8	533.4	0.0	94.4	79.9	275.0	7.7	289.3	1,186.2	457.0	1,932.5
Pip	2020	640.0	529.2	0.0	96.9	84.2	277.2	7.7	290.4	1,169.2	466.0	1,925.6
_	2021	620.8	529.2	0.0	101.2	88.4	279.4	7.7	293.7	1,150.0	476.7	1,920.4
	2022	608.0	533.4	0.0	104.6	93.5	281.6	7.7	298.1	1,141.4	487.4	1,926.9
ge on Years	2023	601.6	541.8	0.0	108.0	96.9	286.0	7.7	301.4	1,143.4	498.6	1,943.4
% Change c Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-2.0	-0.8	_	2.7	5.3	8.0	0.0	0.4	-1.4	2.0	-0.4
% C	2021	-3.0	0.0	-	4.4	5.1	0.8	0.0	1.1	-1.6	2.3	-0.3
o, U	2022	-2.1	0.8	_	3.4	5.8	8.0	0.0	1.5	-0.8	2.2	0.3
ου	2023	-1.1	1.6	-	3.3	3.6	1.6	0.0	1.1	0.2	2.3	0.9
Share	2019	33.8	27.6	0.0	4.9	4.1	14.2	0.4	15.0	61.4	23.7	100.0
Market	2020	33.2	27.5	0.0	5.0	4.4	14.4	0.4	15.1	60.7	24.2	100.0
	2021	32.3	27.6	0.0	5.3	4.6	14.6	0.4	15.3	59.9	24.8	100.0
	2022	31.6	27.7	0.0	5.4	4.9	14.6	0.4	15.5	59.2	25.3	100.0
%	2023	31.0	27.9	0.0	5.6	5.0	14.7	0.4	15.5	58.8	25.7	100.0

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## 9.17 ESP - Spain

## Floor Heating / Surface Heating & Cooling - Spain

SL	Year	ľ	Metal-Pip	oes		Plastic-	Pipes		Multi	To	otals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es :	2019	0.0	12.6	0.0	551.6	486.2	0.0	5.5	148.2	12.6	1,043.4	1,204.2
Pipes	2020	0.0	12.6	0.0	563.6	496.4	0.0	5.5	152.1	12.6	1,065.4	1,230.1
_	2021	0.0	12.6	0.0	602.6	532.9	0.0	6.6	162.5	12.6	1,142.2	1,317.3
	2022	0.0	12.6	0.0	629.0	557.6	0.0	6.6	169.0	12.6	1,193.2	1,374.8
ears	2023	0.0	12.6	0.0	667.2	591.6	0.0	6.6	179.4	12.6	1,265.4	1,457.4
% Change o Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-	0.0	_	2.2	2.1	_	0.0	21.3	0.0	2.1	4.1
% C	2021	-	0.0	_	6.9	7.4	_	20.0	26.3	0.0	7.2	9.2
۰, ۳	2022	-	0.0	_	4.4	4.6	_	0.0	22.9	0.0	4.5	6.4
υ	2023	-	0.0	-	6.1	6.1	-	0.0	25.5	0.0	6.1	8.1
Share	2019	0.0	1.0	0.0	45.8	40.4	0.0	0.5	12.3	1.0	86.6	100.0
<del>1</del>	2020	0.0	1.0	0.0	45.8	40.4	0.0	0.4	12.4	1.0	86.6	100.0
Market	2021	0.0	1.0	0.0	45.7	40.5	0.0	0.5	12.3	1.0	86.7	100.0
	2022	0.0	0.9	0.0	45.8	40.6	0.0	0.5	12.3	0.9	86.8	100.0
%	2023	0.0	0.9	0.0	45.8	40.6	0.0	0.5	12.3	0.9	86.8	100.0

## Radiator Connection - Spain

SL	Year	M	letal-Pipe	es		Plastic-	Pipes		Multi	Tot	tals	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	1,337.6	1,213.8	0.0	125.8	19.6	0.0	25.3	1,764.1	2,551.4	170.6	4,486.2
Pip	2020	1,267.2	1,155.0	0.0	119.0	17.8	0.0	23.1	1,677.0	2,422.2	160.0	4,259.2
_	2021	1,267.2	1,150.8	0.0	119.0	17.8	0.0	23.1	1,674.4	2,418.0	160.0	4,252.4
	2022	1,292.8	1,171.8	0.0	120.7	17.8	0.0	23.1	1,703.0	2,464.6	161.6	4,329.2
on ears	2023	1,305.6	1,184.4	0.0	122.4	17.8	0.0	23.1	1,723.8	2,490.0	163.4	4,377.2
% Change o Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-5.3	-4.8	_	-5.4	-8.7	_	-8.7	12.3	-5.1	-6.3	1.1
% C	2021	0.0	-0.4	-	0.0	0.0	-	0.0	18.0	-0.2	0.0	6.3
۰, ۳	2022	2.0	1.8	_	1.4	0.0	_	0.0	20.2	1.9	1.1	8.4
Φ	2023	1.0	1.1	-	1.4	0.0	-	0.0	19.6	1.0	1.1	7.6
Share	2019	29.8	27.1	0.0	2.8	0.4	0.0	0.6	39.3	56.9	3.8	100.0
	2020	29.8	27.1	0.0	2.8	0.4	0.0	0.5	39.4	56.9	3.8	100.0
Market	2021	29.8	27.1	0.0	2.8	0.4	0.0	0.5	39.4	56.9	3.8	100.0
	2022	29.9	27.1	0.0	2.8	0.4	0.0	0.5	39.3	56.9	3.7	100.0
%	2023	29.8	27.1	0.0	2.8	0.4	0.0	0.5	39.4	56.9	3.7	100.0

### Sanitary / Hot & Cold Water Systems - Spain

SL	Year	ľ	Metal-Pip	es		Plastic	-Pipes		Multi	To	tals	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes in	2019	396.8	2,352.0	313.6	448.0	170.8	1,086.8	53.9	1,758.9	3,062.4	1,759.5	6,580.8
ğ.	2020	377.6	2,301.6	307.2	438.6	167.4	1,062.6	52.8	1,719.9	2,986.4	1,721.4	6,427.8
_	2021	377.6	2,360.4	313.6	450.5	171.7	1,091.2	53.9	1,766.7	3,051.6	1,767.3	6,585.6
	2022	377.6	2,423.4	320.0	463.2	176.8	1,122.0	55.0	1,817.4	3,121.0	1,817.0	6,755.4
ge on Years	2023	384.0	2,511.6	332.8	480.3	182.8	1,161.6	57.2	1,883.7	3,228.4	1,881.8	6,993.9
nge s Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Change Previous Ye	2020	-4.8	-2.1	-2.0	-2.1	-2.0	-2.2	-2.0	15.6	-2.5	-2.2	1.9
	2021	0.0	2.6	2.1	2.7	2.5	2.7	2.1	21.4	2.2	2.7	6.9
o,	2022	0.0	2.7	2.0	2.8	3.0	2.8	2.0	21.6	2.3	2.8	7.0
υ	2023	1.7	3.6	4.0	3.7	3.4	3.5	4.0	22.5	3.4	3.6	8.0
Share	2019	6.0	35.7	4.8	6.8	2.6	16.5	0.8	26.7	46.5	26.7	100.0
<del>;;</del>	2020	5.9	35.8	4.8	6.8	2.6	16.5	0.8	26.8	46.5	26.8	100.0
Market	2021	5.7	35.8	4.8	6.8	2.6	16.6	8.0	26.8	46.3	26.8	100.0
	2022	5.6	35.9	4.7	6.9	2.6	16.6	8.0	26.9	46.2	26.9	100.0
%	2023	5.5	35.9	4.8	6.9	2.6	16.6	0.8	26.9	46.2	26.9	100.0

## Heating & Plumbing Pipes - Spain

SL	Year	N	letal-Pipe	es		Plastic-	Pipes		Multi	To	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es ::	2019	1,734.4	3,578.4	313.6	1,125.4	676.6	1,086.8	84.7	3,106.4	5,626.4	2,973.5	11,706.3
Pipes	2020	1,644.8	3,469.2	307.2	1,121.2	681.7	1,062.6	81.4	3,003.0	5,421.2	2,946.9	11,371.1
_	2021	1,644.8	3,523.8	313.6	1,172.2	722.5	1,091.2	83.6	3,049.2	5,482.2	3,069.5	11,600.9
	2022	1,670.4	3,607.8	320.0	1,213.0	752.3	1,122.0	84.7	3,121.8	5,598.2	3,171.9	11,891.9
ge on Years	2023	1,689.6	3,708.6	332.8	1,269.9	792.2	1,161.6	86.9	3,204.3	5,731.0	3,310.6	12,245.9
Change evious Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	-5.2	-3.1	-2.0	-0.4	8.0	-2.2	-3.9	-3.3	-3.7	-0.9	-2.9
% C	2021	0.0	1.6	2.1	4.6	6.0	2.7	2.7	1.5	1.1	4.2	2.0
o,	2022	1.6	2.4	2.0	3.5	4.1	2.8	1.3	2.4	2.1	3.3	2.5
a)	2023	1.2	2.8	4.0	4.7	5.3	3.5	2.6	2.6	2.4	4.4	3.0
Share	2019	14.8	30.6	2.7	9.6	5.8	9.3	0.7	26.5	48.1	25.4	100.0
	2020	14.5	30.5	2.7	9.9	6.0	9.3	0.7	26.4	47.7	25.9	100.0
Market	2021	14.2	30.4	2.7	10.1	6.2	9.4	0.7	26.3	47.3	26.5	100.0
	2022	14.1	30.3	2.7	10.2	6.3	9.4	0.7	26.3	47.1	26.7	100.0
%	2023	13.8	30.3	2.7	10.4	6.5	9.5	0.7	26.2	46.8	27.0	100.0

### 9.18 SWE - Sweden

## Floor Heating / Surface Heating & Cooling - Sweden

SL	Year	ı	Metal-Pip	oes	ı	Plastic-P	ipes		Multi	To	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es :	2019	0.0	25.2	0.0	1,270.8	196.4	0.0	0.0	16.9	25.2	1,467.1	1,509.2
Pipes	2020	0.0	25.2	0.0	1,290.3	199.8	0.0	0.0	16.9	25.2	1,490.0	1,532.2
_	2021	0.0	21.0	0.0	1,293.7	199.8	0.0	0.0	18.2	21.0	1,493.4	1,532.6
	2022	0.0	25.2	0.0	1,422.9	220.2	0.0	0.0	19.5	25.2	1,643.0	1,687.8
on ears	2023	0.0	25.2	0.0	1,450.1	224.4	0.0	0.0	19.5	25.2	1,674.5	1,719.2
쌇≻	2019	_	_	_	_	_	_	_	_	_	_	_
% Change Previous Ye	2020	_	0.0	_	1.5	1.7	_	_	18.2	0.0	1.6	1.7
% C	2021	-	-16.7	-	0.3	0.0	-	-	27.3	-16.7	0.2	0.2
o,	2022	-	20.0	_	10.0	10.2	_	_	26.6	20.0	10.0	10.3
Φ	2023	-	0.0	-	1.9	1.9	-	-	18.2	0.0	1.9	2.0
Share	2019	0.0	1.7	0.0	84.2	13.0	0.0	0.0	1.1	1.7	97.2	100.0
	2020	0.0	1.6	0.0	84.2	13.0	0.0	0.0	1.1	1.6	97.3	100.0
Market	2021	0.0	1.4	0.0	84.4	13.0	0.0	0.0	1.2	1.4	97.4	100.0
	2022	0.0	1.5	0.0	84.3	13.0	0.0	0.0	1.2	1.5	97.4	100.0
%	2023	0.0	1.5	0.0	84.3	13.1	0.0	0.0	1.1	1.5	97.4	100.0

### Radiator Connection - Sweden

Su	Year	M	letal-Pipe	es		Plastic-F	Pipes		Multi	To	tals	Total
Tons ו		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	1,651.2	1,650.6	0.0	102.0	0.0	0.0	0.0	308.1	3,301.8	102.0	3,711.9
Pipe	2020	1,568.0	1,562.4	0.0	96.9	0.0	0.0	0.0	292.5	3,130.4	96.9	3,519.8
_	2021	1,568.0	1,562.4	0.0	96.9	0.0	0.0	0.0	292.5	3,130.4	96.9	3,519.8
	2022	1,676.8	1,671.6	0.0	102.8	0.0	0.0	0.0	312.0	3,348.4	102.8	3,763.2
on ears	2023	1,664.0	1,663.2	0.0	102.0	0.0	0.0	0.0	310.7	3,327.2	102.0	3,739.9
ᄣᅩ	2019	_	_	_	_	_	_	_	_	_	_	_
% Change Previous Y	2020	-5.0	-5.3	_	-5.0	_	_	_	12.2	-5.2	-5.0	-3.9
o o	2021	0.0	0.0	-	0.0	-	-	-	18.2	0.0	0.0	1.3
∘∕ ⊡	2022	6.9	7.0	_	6.1	_	_	-	26.1	7.0	6.1	8.3
Φ	2023	-0.8	-0.5	-	-0.8	-	-	-	17.7	-0.6	-0.8	0.7
Share	2019	44.5	44.5	0.0	2.7	0.0	0.0	0.0	8.3	89.0	2.7	100.0
	2020	44.5	44.4	0.0	2.8	0.0	0.0	0.0	8.3	88.9	2.8	100.0
ark 8	2021	44.5	44.4	0.0	2.8	0.0	0.0	0.0	8.3	88.9	2.8	100.0
Market	2022	44.6	44.4	0.0	2.7	0.0	0.0	0.0	8.3	89.0	2.7	100.0
%	2023	44.5	44.5	0.0	2.7	0.0	0.0	0.0	8.3	89.0	2.7	100.0

## Sanitary / Hot & Cold Water Systems - Sweden

Su	Year	I	Metal-Pip	es		Plastic-F	Pipes		Multi	To	tals	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	0.0	1,222.2	422.4	415.6	8.5	0.0	5.5	486.2	1,644.6	429.6	2,560.4
Pipes	2020	0.0	1,184.4	409.6	402.0	8.5	0.0	5.5	469.3	1,594.0	416.0	2,479.4
_	2021	0.0	1,192.8	409.6	405.4	8.5	0.0	5.5	473.2	1,602.4	419.4	2,495.0
	2022	0.0	1,272.6	441.6	433.5	8.5	0.0	5.5	508.3	1,714.2	447.5	2,670.0
on	2023	0.0	1,272.6	441.6	434.4	8.5	0.0	5.5	508.3	1,714.2	448.4	2,670.8
% Change on Previous Years	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	-3.1	-3.0	-3.3	0.0	_	0.0	14.1	-3.1	-3.2	-0.3
% C	2021	-	0.7	0.0	0.8	0.0	-	0.0	19.2	0.5	8.0	3.7
∘∕	2022	-	6.7	7.8	6.9	0.0	_	0.0	26.9	7.0	6.7	10.2
ø	2023	-	0.0	0.0	0.2	0.0	-	0.0	18.2	0.0	0.2	3.1
Share	2019	0.0	47.7	16.5	16.2	0.3	0.0	0.2	19.0	64.2	16.8	100.0
Market Sha	2020	0.0	47.8	16.5	16.2	0.3	0.0	0.2	18.9	64.3	16.8	100.0
	2021	0.0	47.8	16.4	16.3	0.3	0.0	0.2	19.0	64.2	16.8	100.0
ž	2022	0.0	47.7	16.5	16.2	0.3	0.0	0.2	19.0	64.2	16.8	100.0
%	2023	0.0	47.6	16.5	16.3	0.3	0.0	0.2	19.0	64.2	16.8	100.0

## Heating & Plumbing Pipes - Sweden

SL	Year	M	letal-Pipe	es	F	Plastic-P	ipes		Multi	To	tals	Total
Tons ו		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	1,651.2	2,898.0	422.4	1,788.4	204.9	0.0	5.5	686.4	4,971.6	1,998.8	7,656.8
Pip	2020	1,568.0	2,772.0	409.6	1,789.3	208.3	0.0	5.5	658.9	4,749.6	2,003.0	7,411.5
_	2021	1,568.0	2,776.2	409.6	1,796.1	208.3	0.0	5.5	663.3	4,753.8	2,009.8	7,426.9
	2022	1,676.8	2,969.4	441.6	1,959.3	228.7	0.0	5.5	710.6	5,087.8	2,193.4	7,991.8
ge on Years	2023	1,664.0	2,961.0	441.6	1,986.5	232.9	0.0	5.5	709.5	5,066.6	2,224.9	8,001.0
% Change o Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-5.0	-4.4	-3.0	0.1	1.7	_	0.0	-4.0	-4.5	0.2	-3.2
% C	2021	0.0	0.2	0.0	0.4	0.0	-	0.0	0.7	0.1	0.3	0.2
o,	2022	6.9	7.0	7.8	9.1	9.8	-	0.0	7.1	7.0	9.1	7.6
ω	2023	-0.8	-0.3	0.0	1.4	1.9	-	0.0	-0.2	-0.4	1.4	0.1
Share	2019	21.6	37.9	5.5	23.4	2.7	0.0	0.1	9.0	64.9	26.1	100.0
	2020	21.2	37.4	5.5	24.1	2.8	0.0	0.1	8.9	64.1	27.0	100.0
Market	2021	21.1	37.4	5.5	24.2	2.8	0.0	0.1	8.9	64.0	27.1	100.0
	2022	21.0	37.2	5.5	24.5	2.9	0.0	0.1	8.9	63.7	27.5	100.0
%	2023	20.8	37.0	5.5	24.8	2.9	0.0	0.1	8.9	63.3	27.8	100.0

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### 9.19 CHE - Switzerland

## Floor Heating / Surface Heating & Cooling - Switzerland

SL	Year	ı	Metal-Pi <sub>l</sub>	oes		Plastic-l	Pipes		Multi	To	tals	Total
Tons ר		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	0.0	21.0	0.0	123.2	9.4	0.0	9.9	1,748.5	21.0	142.5	1,912.0
Pipes	2020	0.0	21.0	0.0	124.1	9.4	0.0	9.9	1,762.8	21.0	143.4	1,927.2
_	2021	0.0	21.0	0.0	126.6	9.4	0.0	9.9	1,799.2	21.0	145.9	1,966.1
	2022	0.0	21.0	0.0	125.8	9.4	0.0	9.9	1,783.6	21.0	145.0	1,949.6
ears	2023	0.0	21.0	0.0	131.8	10.2	0.0	9.9	1,861.6	21.0	151.8	2,034.4
% Change c Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	0.0	_	0.7	0.0	_	0.0	19.1	0.0	0.6	17.3
	2021	-	0.0	-	2.1	0.0	_	0.0	20.6	0.0	1.8	18.7
o, <sub>C</sub>	2022	-	0.0	_	-0.7	0.0	_	0.0	17.2	0.0	-0.6	15.4
Φ	2023	-	0.0	-	4.7	9.1	-	0.0	23.4	0.0	4.7	21.4
Share	2019	0.0	1.1	0.0	6.4	0.5	0.0	0.5	91.4	1.1	7.5	100.0
Market	2020	0.0	1.1	0.0	6.4	0.5	0.0	0.5	91.5	1.1	7.4	100.0
	2021	0.0	1.1	0.0	6.4	0.5	0.0	0.5	91.5	1.1	7.4	100.0
	2022	0.0	1.1	0.0	6.5	0.5	0.0	0.5	91.5	1.1	7.4	100.0
%	2023	0.0	1.0	0.0	6.5	0.5	0.0	0.5	91.5	1.0	7.5	100.0

### Radiator Connection - Switzerland

us	Year	N	Лetal-Рір	es		Plastic	-Pipes		Multi	To	tals	Total
ר Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	723.2	180.6	0.0	57.8	0.0	0.0	4.4	543.4	903.8	62.2	1,509.4
Pipes	2020	710.4	176.4	0.0	56.1	0.0	0.0	4.4	534.3	886.8	60.5	1,481.6
_	2021	704.0	176.4	0.0	55.2	0.0	0.0	4.4	531.7	880.4	59.6	1,471.8
	2022	659.2	168.0	0.0	51.8	0.0	0.0	3.3	497.9	827.2	55.2	1,380.2
on ears	2023	659.2	172.2	0.0	52.7	0.0	0.0	3.3	510.9	831.4	56.0	1,398.3
ᄣᅩ	2019	_	_	_	_	_	_	_	_	_	_	_
% Change Previous Y	2020	-1.8	-2.3	_	-2.9	_	_	0.0	16.2	-1.9	-2.7	3.9
o o	2021	-0.9	0.0	-	-1.5	-	-	0.0	17.6	-0.7	-1.4	5.2
o∕	2022	-6.4	-4.8	_	-6.2	_	_	-25.0	10.7	-6.0	-7.5	-0.7
Φ	2023	0.0	2.5	-	1.6	-	-	0.0	21.3	0.5	1.5	7.3
Share	2019	47.9	12.0	0.0	3.8	0.0	0.0	0.3	36.0	59.9	4.1	100.0
Market	2020	47.9	11.9	0.0	3.8	0.0	0.0	0.3	36.1	59.9	4.1	100.0
	2021	47.8	12.0	0.0	3.8	0.0	0.0	0.3	36.1	59.8	4.1	100.0
	2022	47.8	12.2	0.0	3.8	0.0	0.0	0.2	36.1	59.9	4.0	100.0
%	2023	47.1	12.3	0.0	3.8	0.0	0.0	0.2	36.5	59.5	4.0	100.0

## Sanitary / Hot & Cold Water Systems - Switzerland

SL.	Year	ı	Metal-Pip	oes		Plastic-	Pipes		Multi	To	tals	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	0.0	79.8	755.2	289.0	0.0	0.0	113.3	799.5	835.0	402.3	2,036.8
Pipes	2020	0.0	79.8	755.2	289.8	0.0	0.0	113.3	802.1	835.0	403.2	2,040.2
_	2021	0.0	79.8	761.6	290.7	0.0	0.0	114.4	807.3	841.4	405.1	2,053.8
	2022	0.0	79.8	736.0	281.4	0.0	0.0	111.1	783.9	815.8	392.5	1,992.2
ge on Years	2023	0.0	79.8	761.6	290.7	0.0	0.0	114.4	812.5	841.4	405.1	2,059.0
% Change or Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	0.0	0.0	0.3	_	_	0.0	18.6	0.0	0.2	6.6
	2021	-	0.0	8.0	0.3	-	-	1.0	18.9	8.0	0.5	7.1
	2022	-	0.0	-3.4	-3.2	_	_	-2.9	14.8	-3.0	-3.1	3.2
υ	2023	-	0.0	3.5	3.3	-	-	3.0	22.5	3.1	3.2	10.0
Share	2019	0.0	3.9	37.1	14.2	0.0	0.0	5.6	39.3	41.0	19.8	100.0
Market	2020	0.0	3.9	37.0	14.2	0.0	0.0	5.6	39.3	40.9	19.8	100.0
	2021	0.0	3.9	37.1	14.2	0.0	0.0	5.6	39.3	41.0	19.7	100.0
	2022	0.0	4.0	36.9	14.1	0.0	0.0	5.6	39.3	41.0	19.7	100.0
%	2023	0.0	3.9	37.0	14.1	0.0	0.0	5.6	39.5	40.9	19.7	100.0

## Heating & Plumbing Pipes - Switzerland

SL	Year	N	Лetal-Рір	es		Plastic-	Pipes		Multi	To	tals	Total
Tons ו		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	723.2	281.4	755.2	470.1	9.4	0.0	127.6	2,615.8	1,759.8	607.0	4,982.6
Pipes	2020	710.4	277.2	755.2	470.1	9.4	0.0	127.6	2,622.4	1,742.8	607.0	4,972.2
_	2021	704.0	277.2	761.6	472.6	9.4	0.0	128.7	2,655.4	1,742.8	610.7	5,008.9
	2022	659.2	268.8	736.0	459.0	9.4	0.0	124.3	2,593.8	1,664.0	592.7	4,850.5
% Change on Previous Years	2023	659.2	273.0	761.6	475.2	10.2	0.0	127.6	2,695.0	1,693.8	613.0	5,001.8
	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-1.8	-1.5	0.0	0.0	0.0	_	0.0	0.3	-1.0	0.0	-0.2
	2021	-0.9	0.0	0.9	0.5	0.0	-	0.9	1.3	0.0	0.6	0.7
∘∕	2022	-6.4	-3.0	-3.4	-2.9	0.0	_	-3.4	-2.3	-4.5	-3.0	-3.2
d)	2023	0.0	1.6	3.5	3.5	9.1	-	2.7	3.9	1.8	3.4	3.1
Share	2019	14.5	5.7	15.2	9.4	0.2	0.0	2.6	52.5	35.3	12.2	100.0
	2020	14.3	5.6	15.2	9.5	0.2	0.0	2.6	52.7	35.1	12.2	100.0
Market	2021	14.1	5.5	15.2	9.4	0.2	0.0	2.6	53.0	34.8	12.2	100.0
	2022	13.6	5.5	15.2	9.5	0.2	0.0	2.6	53.5	34.3	12.2	100.0
%	2023	13.2	5.5	15.2	9.5	0.2	0.0	2.6	53.9	33.9	12.3	100.0

## 9.20 Europe

## Floor Heating / Surface Heating & Cooling - Europe

ns	Year	M	letal-Pipe	es		Plastic-F	Pipes		Multi	To	tals	Total
Tons ר		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	12.8	3,284.4	0.0	14,609.0	13,780.2	90.2	1,680.8	6,631.3	3,297.2	30,160.2	40,088.7
Pipes	2020	12.8	3,347.4	0.0	14,593.7	14,104.1	96.8	1,501.5	6,661.2	3,360.2	30,296.0	40,317.4
_	2021	6.4	3,393.6	0.0	14,973.6	14,405.0	99.0	1,668.7	6,856.2	3,400.0	31,146.3	41,402.5
	2022	6.4	3,553.2	0.0	15,856.8	15,136.8	94.6	1,795.2	7,079.8	3,559.6	32,883.4	43,522.8
on ears	2023	0.0	3,679.2	0.0	16,424.6	15,601.8	105.6	1,881.0	7,322.9	3,679.2	34,012.9	45,015.0
ω >-	2019	_	_	_	_	_	_	_	_	_	_	_
% Change Previous Ye	2020	0.0	1.9	-	-0.1	2.4	7.3	-10.7	18.7	1.9	0.5	3.2
	2021	-50.0	1.4	-	2.6	2.1	2.3	11.1	21.6	1.2	2.8	5.4
o,	2022	0.0	4.7	_	5.9	5.1	-4.4	7.6	22.0	4.7	5.6	7.9
υ	2023	-100.0	3.5	-	3.6	3.1	11.6	4.8	22.2	3.4	3.4	6.1
Share	2019	0.0	8.2	0.0	36.4	34.4	0.2	4.2	16.5	8.2	75.2	100.0
<del>1</del>	2020	0.0	8.3	0.0	36.2	35.0	0.2	3.7	16.5	8.3	75.1	100.0
Market	2021	0.0	8.2	0.0	36.2	34.8	0.2	4.0	16.6	8.2	75.2	100.0
	2022	0.0	8.2	0.0	36.4	34.8	0.2	4.1	16.3	8.2	75.6	100.0
%	2023	0.0	8.2	0.0	36.5	34.7	0.2	4.2	16.3	8.2	75.6	100.0

### Radiator Connection - Europe

SL	Year	N	letal-Pipes	6		Plastic-	Pipes		Multi	Tota	als	Total
Tons ו		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	34,598.4	71,080.8	0.0	2,627.4	423.3	565.4	783.2	14,908.4	105,679.2	4,399.3	124,986.9
Pipes	2020	34,144.0	66,784.2	0.0	2,517.7	409.7	583.0	690.8	14,527.5	100,928.2	4,201.2	119,656.9
_	2021	33,964.8	67,401.6	0.0	2,485.4	408.0	578.6	724.9	14,459.9	101,366.4	4,196.9	120,023.2
	2022	34,156.8	68,119.8	0.0	2,481.2	407.2	580.8	741.4	14,550.9	102,276.6	4,210.5	121,038.0
on ears	2023	33,408.0	67,691.4	0.0	2,479.5	404.6	574.2	741.4	14,467.7	101,099.4	4,199.7	119,766.8
e >	2019	_	_	_	_	_	_	_	_	_	_	_
% Change Previous Ye	2020	-1.3	-6.0	_	-4.2	-3.2	3.1	-11.8	15.2	-4.5	-4.5	-2.5
	2021	-0.5	0.9	-	-1.3	-0.4	-0.8	4.9	17.6	0.4	-0.1	2.2
∘∕ ⊡	2022	0.6	1.1	-	-0.2	-0.2	0.4	2.3	18.9	0.9	0.3	2.7
d)	2023	-2.2	-0.6	-	-0.1	-0.6	-1.1	0.0	17.5	-1.2	-0.3	0.8
Share	2019	27.7	56.9	0.0	2.1	0.3	0.5	0.6	11.9	84.6	3.5	100.0
55	2020	28.5	55.8	0.0	2.1	0.3	0.5	0.6	12.1	84.3	3.5	100.0
Market	2021	28.3	56.2	0.0	2.1	0.3	0.5	0.6	12.0	84.5	3.5	100.0
	2022	28.2	56.3	0.0	2.0	0.3	0.5	0.6	12.0	84.5	3.5	100.0
%	2023	27.9	56.5	0.0	2.1	0.3	0.5	0.6	12.1	84.4	3.5	100.0

### Sanitary / Hot & Cold Water Systems - Europe

SL	Year	ı	Metal-Pip	es		Plastic	-Pipes		Multi	Tot	tals	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	PB	layer	Metal	Plastics	
es in	2019	4,646.4	72,227.4	20,851.2	6,929.2	806.7	5,878.4	2,121.9	24,991.2	97,725.0	15,736.2	138,452.4
Pipes	2020	4,467.2	68,749.8	20,870.4	6,766.9	802.4	5,988.4	1,923.9	24,837.8	94,087.4	15,481.6	134,406.8
_	2021	4,390.4	70,163.1	20,928.0	6,759.2	811.8	6,074.2	2,027.3	25,002.9	95,481.5	15,672.5	136,156.9
	2022	4,256.0	71,118.6	21,209.6	6,789.8	827.9	6,168.8	2,068.0	25,412.4	96,584.2	15,854.5	137,851.1
ge on Years	2023	4,179.2	71,845.2	21,286.4	6,886.7	841.5	6,300.8	2,083.4	25,685.4	97,310.8	16,112.4	139,108.6
ige s Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Change Previous Ye	2020	-3.9	-4.8	0.1	-2.3	-0.5	1.9	-9.3	17.5	-3.7	-1.6	-0.1
o C	2021	-1.7	2.1	0.3	-0.1	1.2	1.4	5.4	19.0	1.5	1.2	4.3
o,	2022	-3.1	1.4	1.3	0.5	2.0	1.6	2.0	20.1	1.2	1.2	4.2
Φ	2023	-1.8	1.0	0.4	1.4	1.6	2.1	0.7	19.5	0.8	1.6	3.9
Share	2019	3.4	52.2	15.1	5.0	0.6	4.2	1.5	18.1	70.6	11.4	100.0
	2020	3.3	51.2	15.5	5.0	0.6	4.5	1.4	18.5	70.0	11.5	100.0
Market	2021	3.2	51.5	15.4	5.0	0.6	4.5	1.5	18.4	70.1	11.5	100.0
	2022	3.1	51.6	15.4	4.9	0.6	4.5	1.5	18.4	70.1	11.5	100.0
%	2023	3.0	51.6	15.3	5.0	0.6	4.5	1.5	18.5	70.0	11.6	100.0

## Heating & Plumbing Pipes - Europe

SL	Year	1	Metal-Pipes	6		Plastic-	Pipes		Multi	Tot	als	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
	2019	39,257.6	146,592.6	20,851.2	24,165.5	15,010.2	6,534.0	4,585.9	39,372.3	206,701.4	50,295.6	296,369.3
Pipes	2020	38,624.0	138,881.4	20,870.4	23,878.2	15,316.2	6,668.2	4,116.2	38,945.5	198,375.8	49,978.8	287,300.1
_	2021	38,361.6	140,958.3	20,928.0	24,218.2	15,624.7	6,751.8	4,420.9	39,193.0	200,247.9	51,015.6	290,456.5
	2022	38,419.2	142,791.6	21,209.6	25,127.7	16,371.9	6,844.2	4,604.6	39,805.7	202,420.4	52,948.4	295,174.5
on ears	2023	37,587.2	143,215.8	21,286.4	25,790.7	16,847.9	6,980.6	4,705.8	40,172.0	202,089.4	54,325.0	296,586.4
% Change or Previous Year	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-1.6	-5.3	0.1	-1.2	2.0	2.1	-10.2	-1.1	-4.0	-0.6	-3.1
	2021	-0.7	1.5	0.3	1.4	2.0	1.3	7.4	0.6	0.9	2.1	1.1
o,	2022	0.2	1.3	1.4	3.8	4.8	1.4	4.2	1.6	1.1	3.8	1.6
υ	2023	-2.2	0.3	0.4	2.6	2.9	2.0	2.2	0.9	-0.2	2.6	0.5
Share	2019	13.3	49.5	7.0	8.2	5.1	2.2	1.6	13.3	69.7	17.0	100.0
<del>بر</del> 3	2020	13.4	48.3	7.3	8.3	5.3	2.3	1.4	13.6	69.1	17.4	100.0
Market	2021	13.2	48.5	7.2	8.3	5.4	2.3	1.5	13.5	68.9	17.6	100.0
	2022	13.0	48.4	7.2	8.5	5.6	2.3	1.6	13.5	68.6	17.9	100.0
%	2023	12.7	48.3	7.2	8.7	5.7	2.4	1.6	13.5	68.1	18.3	100.0

## 9.21 Western Europe

### Floor Heating / Surface Heating & Cooling - Western Europe

Countries: AUT, BEL, CHE, DEU, DNK, ESP, FRA, FIN, GBR, ITA, IRL, NOR, NLD, PRT, SWE

SL	Year	I	Metal-Pip	oes		Plastic-F	Pipes		Multi	To	tals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	PB	layer	Metal	Plastics	
es :	2019	0.0	2,872.8	0.0	14,134.7	12,898.8	46.2	1,677.5	6,208.8	2,872.8	28,757.1	37,838.7
Pipes	2020	0.0	2,868.6	0.0	14,046.3	13,065.4	44.0	1,498.2	6,197.1	2,868.6	28,653.8	37,719.5
_	2021	0.0	2,889.6	0.0	14,394.8	13,305.1	44.0	1,665.4	6,373.9	2,889.6	29,409.2	38,672.7
	2022	0.0	3,040.8	0.0	15,272.8	14,010.6	44.0	1,790.8	6,593.6	3,040.8	31,118.2	40,752.6
ge on Years	2023	0.0	3,137.4	0.0	15,787.9	14,394.8	44.0	1,876.6	6,808.1	3,137.4	32,103.3	42,048.8
% Change o Previous Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	_	-0.1	_	-0.6	1.3	-4.8	-10.7	18.0	-0.1	-0.4	2.3
	2021	-	0.7	-	2.5	1.8	0.0	11.2	21.6	0.7	2.6	5.2
o, T	2022	-	5.2	-	6.1	5.3	0.0	7.5	22.3	5.2	5.8	8.1
υ	2023	-	3.2	-	3.4	2.7	0.0	4.8	22.0	3.2	3.2	5.8
Share	2019	0.0	7.6	0.0	37.4	34.1	0.1	4.4	16.4	7.6	76.0	100.0
	2020	0.0	7.6	0.0	37.2	34.6	0.1	4.0	16.4	7.6	76.0	100.0
Market	2021	0.0	7.5	0.0	37.2	34.4	0.1	4.3	16.5	7.5	76.0	100.0
	2022	0.0	7.5	0.0	37.5	34.4	0.1	4.4	16.2	7.5	76.4	100.0
%	2023	0.0	7.5	0.0	37.5	34.2	0.1	4.5	16.2	7.5	76.3	100.0

### Radiator Connection - Western Europe

SL	Year	N	letal-Pipes	6		Plastic-	Pipes		Multi	Tot	als	Total
Tons ו		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	27,737.6	63,365.4	0.0	2,385.1	328.1	92.4	731.5	12,954.5	91,103.0	3,537.1	107,594.6
Pipes	2020	26,995.2	58,896.6	0.0	2,270.4	309.4	90.2	640.2	12,496.9	85,891.8	3,310.2	101,698.9
_	2021	26,880.0	59,577.0	0.0	2,240.6	308.6	90.2	674.3	12,446.2	86,457.0	3,313.7	102,216.9
	2022	27,091.2	60,265.8	0.0	2,236.4	308.6	92.4	689.7	12,543.7	87,357.0	3,327.0	103,227.7
on ears	2023	26,393.6	59,833.2	0.0	2,233.0	303.5	92.4	690.8	12,443.6	86,226.8	3,319.6	101,990.0
% Change c revious Yea	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-2.7	-7.1	_	-4.8	-5.7	-2.4	-12.5	14.0	-5.7	-6.4	-3.7
√° Ψ	2021	-0.4	1.2	-	-1.3	-0.3	0.0	5.3	17.7	0.7	0.1	2.4
∘∕	2022	0.8	1.2	-	-0.2	0.0	2.4	2.3	19.1	1.0	0.4	2.9
a	2023	-2.6	-0.7	-	-0.2	-1.7	0.0	0.2	17.2	-1.3	-0.2	0.7
Share	2019	25.8	58.9	0.0	2.2	0.3	0.1	0.7	12.0	84.7	3.3	100.0
	2020	26.5	57.9	0.0	2.2	0.3	0.1	0.6	12.3	84.5	3.3	100.0
Market	2021	26.3	58.3	0.0	2.2	0.3	0.1	0.7	12.2	84.6	3.2	100.0
	2022	26.2	58.4	0.0	2.2	0.3	0.1	0.7	12.2	84.6	3.2	100.0
%	2023	25.9	58.7	0.0	2.2	0.3	0.1	0.7	12.2	84.5	3.3	100.0

### Sanitary / Hot & Cold Water Systems - Western Europe

SL	Year	ı	Metal-Pip	es		Plastic	-Pipes		Multi	Tot	tals	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	PB	layer	Metal	Plastics	
es in	2019	2,208.0	66,809.4	20,768.0	6,437.9	640.9	3,014.0	2,068.0	23,249.2	89,785.4	12,160.8	125,195.4
Pipes	2020	2,016.0	63,012.6	20,780.8	6,249.2	632.4	2,983.2	1,866.7	22,965.8	85,809.4	11,731.5	120,506.7
_	2021	2,022.4	64,388.1	20,832.0	6,239.9	640.1	3,042.6	1,970.1	23,124.4	87,242.5	11,892.6	122,259.5
	2022	1,990.4	65,360.4	21,107.2	6,272.2	653.7	3,126.2	2,010.8	23,550.8	88,458.0	12,062.8	124,071.6
ge on Years	2023	1,939.2	65,948.4	21,171.2	6,355.5	663.0	3,194.4	2,025.1	23,744.5	89,058.8	12,238.0	125,041.3
% Change or Previous Yes	2019	_	_	_	_	_	_	_	_	_	_	_
	2020	-8.7	-5.7	0.1	-2.9	-1.3	-1.0	-9.7	16.7	-4.4	-3.5	-0.9
% C	2021	0.3	2.2	0.2	-0.1	1.2	2.0	5.5	19.0	1.7	1.4	4.5
o,	2022	-1.6	1.5	1.3	0.5	2.1	2.7	2.1	20.4	1.4	1.4	4.5
ω	2023	-2.6	0.9	0.3	1.3	1.4	2.2	0.7	19.2	0.7	1.5	3.8
Share	2019	1.8	53.4	16.6	5.1	0.5	2.4	1.7	18.6	71.7	9.7	100.0
	2020	1.7	52.3	17.2	5.2	0.5	2.5	1.5	19.1	71.2	9.7	100.0
Market	2021	1.7	52.7	17.0	5.1	0.5	2.5	1.6	18.9	71.4	9.7	100.0
	2022	1.6	52.7	17.0	5.1	0.5	2.5	1.6	19.0	71.3	9.7	100.0
%	2023	1.6	52.7	16.9	5.1	0.5	2.6	1.6	19.0	71.2	9.8	100.0

## Heating & Plumbing Pipes - Western Europe

ns	Year	ĺ	Metal-Pipes	5		Plastic-	Pipes		Multi	Tot	als	Total
ι Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
es in	2019	29,945.6	133,047.6	20,768.0	22,957.7	13,867.8	3,152.6	4,477.0	35,887.5	183,761.2	44,455.0	264,103.7
Pipes	2020	29,011.2	124,777.8	20,780.8	22,565.8	14,007.2	3,117.4	4,005.1	35,250.6	174,569.8	43,695.5	253,515.9
_	2021	28,902.4	126,854.7	20,832.0	22,875.2	14,253.7	3,176.8	4,309.8	35,491.5	176,589.1	44,615.5	256,696.1
	2022	29,081.6	128,667.0	21,107.2	23,781.3	14,972.8	3,262.6	4,491.3	36,120.7	178,855.8	46,508.0	261,484.5
ge on Years	2023	28,332.8	128,919.0	21,171.2	24,376.3	15,361.2	3,330.8	4,592.5	36,381.4	178,423.0	47,660.8	262,465.2
Change vious Ye	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	-3.1	-6.2	0.1	-1.7	1.0	-1.1	-10.5	-1.8	-5.0	-1.7	-4.0
% C	2021	-0.4	1.7	0.3	1.4	1.8	1.9	7.6	0.7	1.2	2.1	1.3
о, П	2022	0.6	1.4	1.3	4.0	5.1	2.7	4.2	1.8	1.3	4.2	1.9
υ	2023	-2.6	0.2	0.3	2.5	2.6	2.1	2.3	0.7	-0.2	2.5	0.4
Share	2019	11.3	50.4	7.9	8.7	5.3	1.2	1.7	13.6	69.6	16.8	100.0
	2020	11.4	49.2	8.2	8.9	5.5	1.2	1.6	13.9	68.9	17.2	100.0
Market	2021	11.3	49.4	8.1	8.9	5.6	1.2	1.7	13.8	68.8	17.4	100.0
	2022	11.1	49.2	8.1	9.1	5.7	1.3	1.7	13.8	68.4	17.8	100.0
%	2023	10.8	49.1	8.1	9.3	5.9	1.3	1.8	13.9	68.0	18.2	100.0

## 9.22 Eastern Europe

### Floor Heating / Surface Heating & Cooling - Eastern Europe

Countries: CZE, HUN, POL, SVK

SU	Year	M	letal-Pip	es		Plastic-	Pipes		Multi	To	otals	Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
.= Se	2019	12.8	411.6	0.0	474.3	881.5	44.0	3.3	422.5	424.4	1,403.1	2,250.0
Pipes	2020	12.8	478.8	0.0	547.4	1,038.7	52.8	3.3	464.1	491.6	1,642.2	2,597.9
_	2021	6.4	504.0	0.0	578.9	1,099.9	55.0	3.3	482.3	510.4	1,737.1	2,729.8
	2022	6.4	512.4	0.0	584.0	1,126.3	50.6	4.4	486.2	518.8	1,765.2	2,770.2
ge on Years	2023	0.0	541.8	0.0	636.7	1,207.0	61.6	4.4	514.8	541.8	1,909.7	2,966.3
Change vious Ye	2019	_	_	_	_	_	-	_	_	_	_	_
% Chang Previous	2020	0.0	16.3	_	15.4	17.8	20.0	0.0	29.8	15.8	17.0	18.9
% C	2021	-50.0	5.3	-	5.7	5.9	4.2	0.0	22.8	3.8	5.8	8.0
o, T	2022	0.0	1.7	_	0.9	2.4	-8.0	33.3	19.1	1.6	1.6	4.3
Φ	2023	-100.0	5.7	-	9.0	7.2	21.7	0.0	25.1	4.4	8.2	10.0
Share	2019	0.6	18.3	0.0	21.1	39.2	2.0	0.1	18.8	18.9	62.4	100.0
% Market S	2020	0.5	18.4	0.0	21.1	40.0	2.0	0.1	17.9	18.9	63.2	100.0
	2021	0.2	18.5	0.0	21.2	40.3	2.0	0.1	17.7	18.7	63.6	100.0
	2022	0.2	18.5	0.0	21.1	40.7	1.8	0.2	17.6	18.7	63.7	100.0
	2023	0.0	18.3	0.0	21.5	40.7	2.1	0.1	17.4	18.3	64.4	100.0

### Radiator Connection - Eastern Europe

us	Year	M	letal-Pipe	es	Plastic-Pipes				Multi	Tot	Totals		
Pipes in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics		
	2019	6,860.8	7,715.4	0.0	242.3	95.2	473.0	51.7	1,953.9	14,576.2	862.2	17,392.3	
	2020	7,148.8	7,887.6	0.0	247.4	100.3	492.8	50.6	2,030.6	15,036.4	891.1	17,958.1	
_	2021	7,084.8	7,824.6	0.0	244.8	99.5	488.4	50.6	2,013.7	14,909.4	883.3	17,806.4	
	2022	7,065.6	7,854.0	0.0	244.8	98.6	488.4	51.7	2,007.2	14,919.6	883.5	17,810.3	
ge on Years	2023	7,014.4	7,858.2	0.0	246.5	101.2	481.8	50.6	2,024.1	14,872.6	880.1	17,776.8	
₩ ,,	2019	_	_	_	_	_	_	_	_	_	_	_	
% Char Previous	2020	4.2	2.2	_	2.1	5.4	4.2	-2.1	22.8	3.2	3.4	5.1	
% C	2021	-0.9	-0.8	-	-1.0	-0.8	-0.9	0.0	17.2	-0.8	-0.9	0.9	
o,	2022	-0.3	0.4	_	0.0	-0.9	0.0	2.2	17.8	0.1	0.0	1.8	
υ	2023	-0.7	0.1	-	0.7	2.6	-1.4	-2.1	19.2	-0.3	-0.4	1.6	
Share	2019	39.4	44.4	0.0	1.4	0.5	2.7	0.3	11.2	83.8	5.0	100.0	
% Market S	2020	39.8	43.9	0.0	1.4	0.6	2.7	0.3	11.3	83.7	5.0	100.0	
	2021	39.8	43.9	0.0	1.4	0.6	2.7	0.3	11.3	83.7	5.0	100.0	
	2022	39.7	44.1	0.0	1.4	0.6	2.7	0.3	11.3	83.8	5.0	100.0	
	2023	39.5	44.2	0.0	1.4	0.6	2.7	0.3	11.4	83.7	5.0	100.0	

## Sanitary / Hot & Cold Water Systems - Eastern Europe

SL	Year	N	letal-Pipe	es		Plastic-Pipes				To	Totals	
es in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
	2019	2,438.4	5,418.0	83.2	491.3	165.8	2,864.4	53.9	1,742.0	7,939.6	3,575.4	13,257.0
Pipes	2020	2,451.2	5,737.2	89.6	517.7	170.0	3,005.2	57.2	1,872.0	8,278.0	3,750.1	13,900.1
_	2021	2,368.0	5,775.0	96.0	519.4	171.7	3,031.6	57.2	1,878.5	8,239.0	3,779.9	13,897.4
	2022	2,265.6	5,758.2	102.4	517.7	174.3	3,042.6	57.2	1,861.6	8,126.2	3,791.7	13,779.5
ge on Years	2023	2,240.0	5,896.8	115.2	531.3	178.5	3,106.4	58.3	1,940.9	8,252.0	3,874.5	14,067.4
Change vious Ye	2019	_	_	_	_	_	_	_	_	_	_	_
har ious	2020	0.5	5.9	7.7	5.4	2.6	4.9	6.1	27.0	4.3	4.9	7.0
% Chang Previous`	2021	-3.4	0.7	7.1	0.3	1.0	0.9	0.0	18.6	-0.5	0.8	2.1
o, T	2022	-4.3	-0.3	6.7	-0.3	1.5	0.4	0.0	17.1	-1.4	0.3	1.3
υ	2023	-1.1	2.4	12.5	2.6	2.4	2.1	1.9	23.2	1.5	2.2	4.3
Share	2019	18.4	40.9	0.6	3.7	1.3	21.6	0.4	13.1	59.9	27.0	100.0
Market	2020	17.6	41.3	0.6	3.7	1.2	21.6	0.4	13.5	59.6	27.0	100.0
	2021	17.0	41.6	0.7	3.7	1.2	21.8	0.4	13.5	59.3	27.2	100.0
	2022	16.4	41.8	0.7	3.8	1.3	22.1	0.4	13.5	59.0	27.5	100.0
%	2023	15.9	41.9	8.0	3.8	1.3	22.1	0.4	13.8	58.7	27.5	100.0

### Heating & Plumbing Pipes - Eastern Europe

SL	Year	N	/letal-Pipe	s		Plastic-Pipes				Totals		Total
in Tons		Steel	Copper	StSteel	PEX	PE-RT	PP-R	РВ	layer	Metal	Plastics	
Pipes ii	2019	9,312.0	13,545.0	83.2	1,207.9	1,142.4	3,381.4	108.9	3,484.8	22,940.2	5,840.6	32,265.6
	2020	9,612.8	14,103.6	89.6	1,312.4	1,309.0	3,550.8	111.1	3,694.9	23,806.0	6,283.3	33,784.2
_	2021	9,459.2	14,103.6	96.0	1,343.0	1,371.1	3,575.0	111.1	3,701.5	23,658.8	6,400.2	33,760.5
	2022	9,337.6	14,124.6	102.4	1,346.4	1,399.1	3,581.6	113.3	3,685.0	23,564.6	6,440.4	33,690.0
on ears	2023	9,254.4	14,296.8	115.2	1,414.4	1,486.7	3,649.8	113.3	3,790.6	23,666.4	6,664.2	34,121.2
e. >-	2019	_	_	_	_	_	_	_	_	_	_	_
% Chang Previous	2020	3.2	4.1	7.7	8.7	14.6	5.0	2.0	6.0	3.8	7.6	4.7
o %	2021	-1.6	0.0	7.1	2.3	4.7	0.7	0.0	0.2	-0.6	1.9	-0.1
о, П	2022	-1.3	0.2	6.7	0.3	2.1	0.2	2.0	-0.5	-0.4	0.6	-0.2
a	2023	-0.9	1.2	12.5	5.1	6.3	1.9	0.0	2.9	0.4	3.5	1.3
Share	2019	28.9	42.0	0.3	3.7	3.5	10.5	0.3	10.8	71.1	18.1	100.0
Market	2020	28.5	41.8	0.3	3.9	3.9	10.5	0.3	10.9	70.5	18.6	100.0
	2021	28.0	41.8	0.3	4.0	4.1	10.6	0.3	11.0	70.1	19.0	100.0
	2022	27.7	41.9	0.3	4.0	4.2	10.6	0.3	10.9	70.0	19.1	100.0
%	2023	27.1	41.9	0.3	4.2	4.4	10.7	0.3	11.1	69.4	19.5	100.0