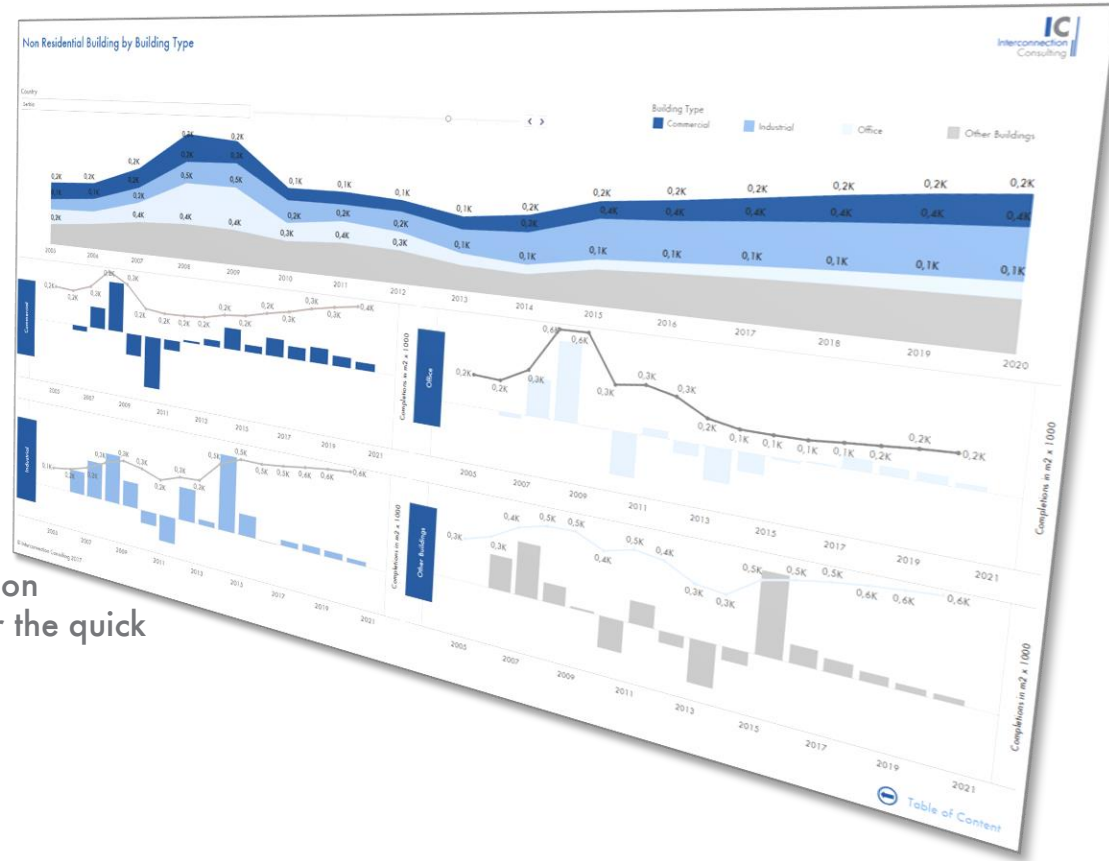


IC Market Tracking  
Residential Ventilation  
Systems in Europe Top 13  
Edition 2022

# Your Benefits at a Glance

- ✓ You will receive a **Tableau Data Cockpit** and as well a PDF regarding the **Total Market** and as well for the different **market segments**.
- ✓ **Market Forecasts** for all product segments and regions for the upcoming three years, based on our econometric indicator models.
- ✓ **Competition Analysis** with **market shares** and development for the last 2 years in comparison to other major competitors and with respect to:
  - Total Market
  - Regional Markets
  - Product Groups and Segments
  - Distribution Channels
  - Building Types
- ✓ Information about the most important **Factors of Influence**
- ✓ Graphic Presentation in our interactive dashboard-solution "Tableau", including download/ export functionality for the quick implementation of the data.



# Residential Ventilation Systems in Europe – Top 13

## Countries Available

- GER
- AUT
- SUI
- ITA
- FRA
- GBR
- ESP
- BEL
- NED
- POL
- SK
- CZ
- NORDICS

### Heat Recovery – Central

Size Classes	Device Type
< 200 m <sup>3</sup> /h	Heat Exchanger
201 -550 m <sup>3</sup> /h	Heat Pump
551 - 1.000 m <sup>3</sup> /h	
1.001 - 15.000 m <sup>3</sup> /h	

### Heat Recovery - Local

Installation Type	Device Type
Window	Single Unit
Wall	Transverse

### Exhaust Ventilation

Central Exhaust
Local Exhaust



Business Segment	Distribution
New Construction	2-Step
Renovation	3-Step



### Building Type

One Family Dwelling
Two Family Dwelling
Multi Storey Building



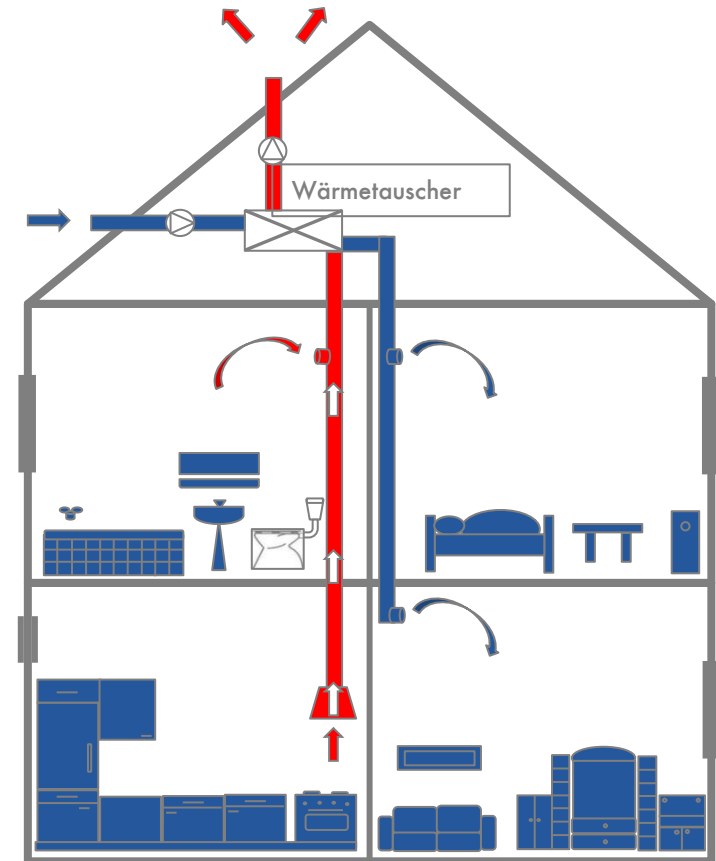
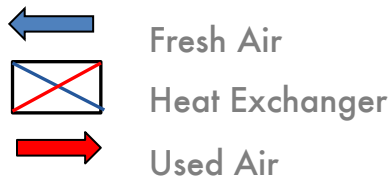
# Air Handling Units with Heat Recovery

## Turnover

Value = Net-Turnover of Air Handling Unit only, Additional Equipment such as Pipes is not Included. No List-Prices, Discounts Included.

## Operating Mode

The supply of fresh air to a residential unit occurs through a device with heat recovery; individual rooms are linked via ductwork that is connected to the device. Depending on its size, a single device can also supply several residential units through the ductwork:



# Air Handling Units with Heat Recovery – Centrally Operated

## Size Classes

< 200 m<sup>3</sup>/h

Small single-family houses without basements and utility rooms as well as apartment buildings (each apartment in a multi-storey apartment building has its own device)

201 -550 m<sup>3</sup>/h

Typical single-family house segment

551 - 1.000 m<sup>3</sup>/h

Two-family houses, villas and other luxury homes. Starting at this size, smaller quantities are used even in the commercial sector (e.g. offices, schools, etc...).

1.001 - 15.000 m<sup>3</sup>/h

All apartments are ventilated through a central device in multi-storey apartment buildings. Commercial ventilation is more important in this segment.

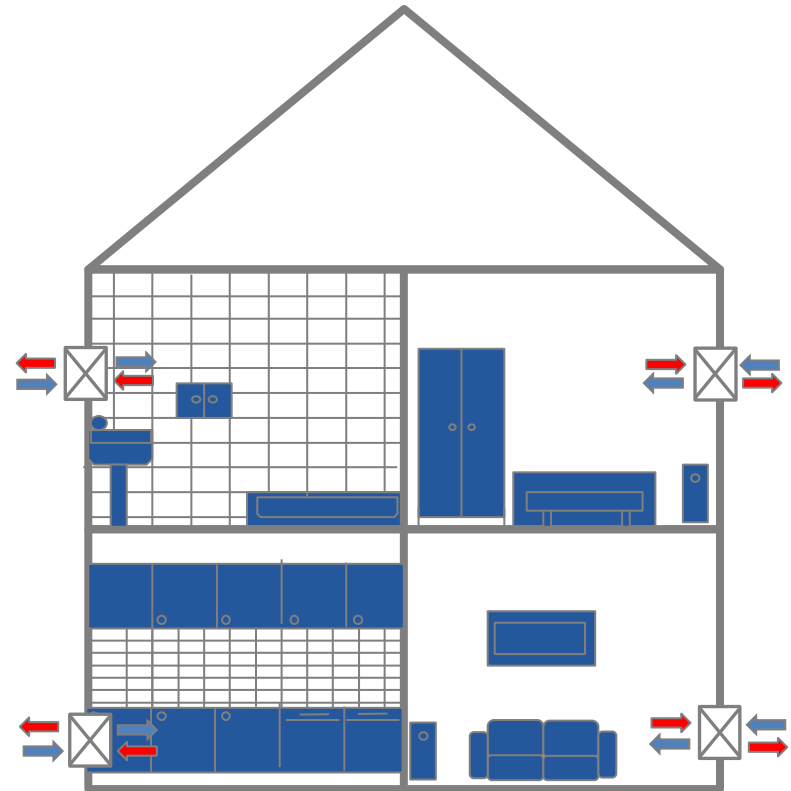
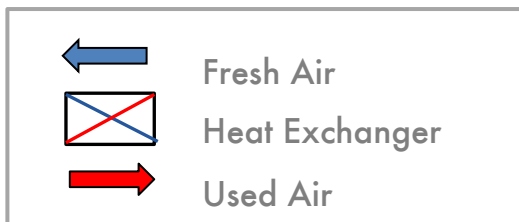
# Air Handling Units with Heat Recovery – Locally Operated

## Turnover

Value to Net-Turnovers (No List-Prices), Discounts Included.

## Operating Mode

The supply of fresh air to a residential unit occurs through multiple devices that are located in individual rooms.



# Air Handling Units with Heat Recovery – Locally Operated

## Product Groups

### Device Type

#### Transverse

Two ventilators are working in parallel operation. While one fan pulls in fresh air, filters it, and releases the clean air into the room, the second fan exhausts the used air.

**Push-pull fans** (also often called Transverse Systems / “Pendellüfter in German”) are used in decentralized living space ventilation. The decentralized ventilation device for a predefined period of time is pushing the used, warm air out of the living space. After a certain time, the fan implemented in the ventilation unit changes its direction of rotation, it reverses. Now the fan draws fresh air into the building from outside the building. The outside air brought in is filtered from dust, pollen or fine dust by a filter. Furthermore, the air is passed through a heat exchanger during the push phase, which temporarily stores the thermal energy. In the pull phase, the fan pulls the outside air through the heat exchanger so that it flows into the building preheated. Due to the change in direction / the reversal of the fan, push-pull ventilation is also referred to as pendulum ventilation. These push- und Pull Systems are often sold as a pair (two units)

### Single Unit

A single unit is responsible for releasing fresh air into the room as well as exhausting the used air.

In contrast to Push and Pull where you have a period of push and a period of pull, single room ventilators have a simultaneous supply and exhaust air operation.

### Installation Type

#### Wall Mounted

The ventilation units are being mounted to a wall.

#### Window Mounted

The ventilation unit is being mounted below the window. Usually window and ventilation unit are being installed/replaced together which is why both can be considered as one.

# Exhaust Ventilation without Heat Recovery

Turnover

Value to Net-Turnovers (No List-Prices), Discounts Included.

Operating Mode

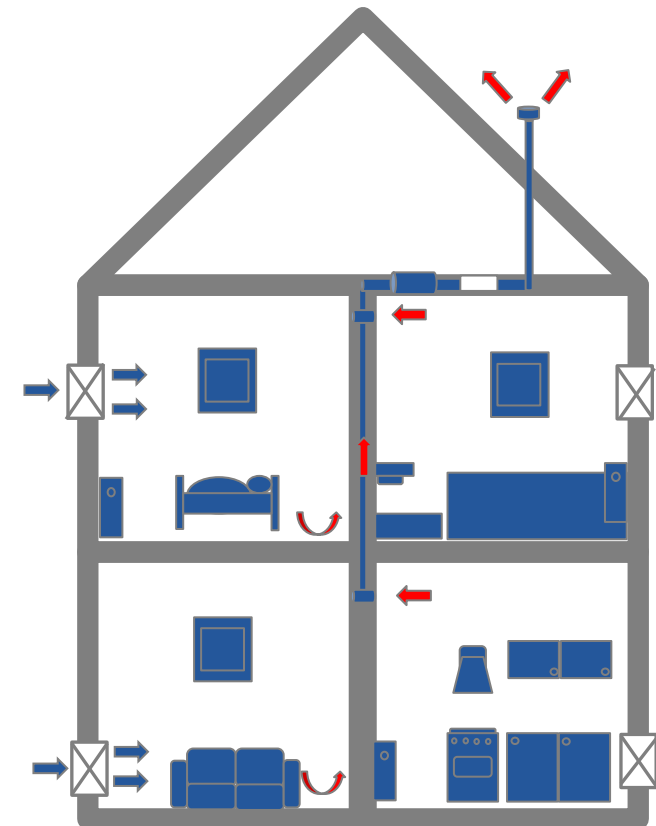
Local Exhaust

In typical wet rooms such as kitchen or bath room ducted fans are installed. These ducted fans suck the air into a pipe system and push it out of the building.

Central Exhaust

Under or on top of the roof of the building is a central ventilator. This ventilator is connected to individual living units via pipe system.

In multi-storey buildings the ventilator covers several living units, usually between 7-30 living units. In rare cases, a big roof ventilator is covering several 100 living units

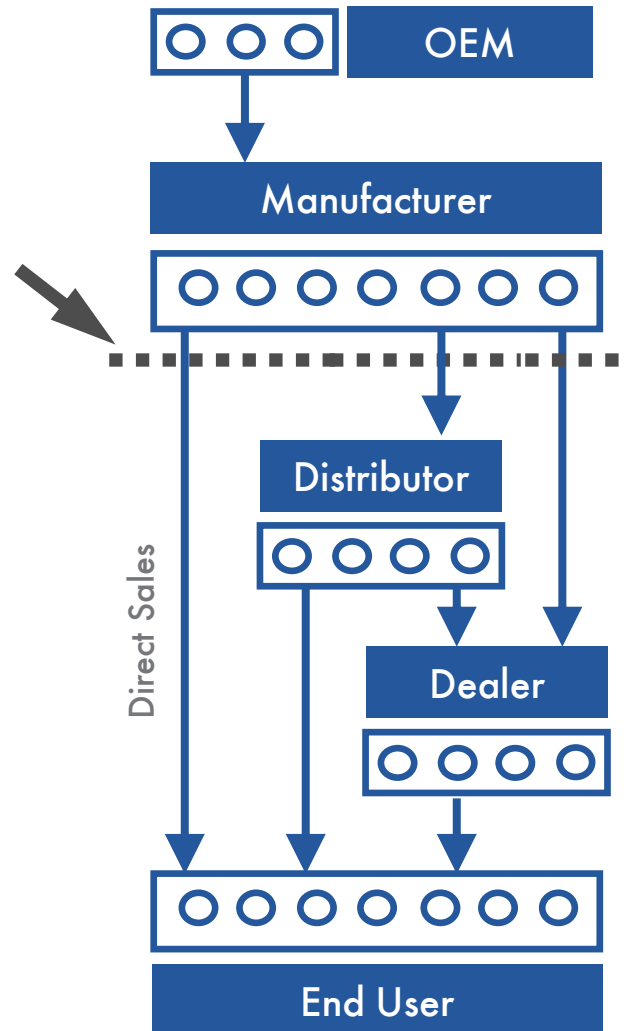




# What Do We Measure in Our Reports?

Interconnection measures the total sales at street prices without VAT per branch to the first buyer (without OEM)

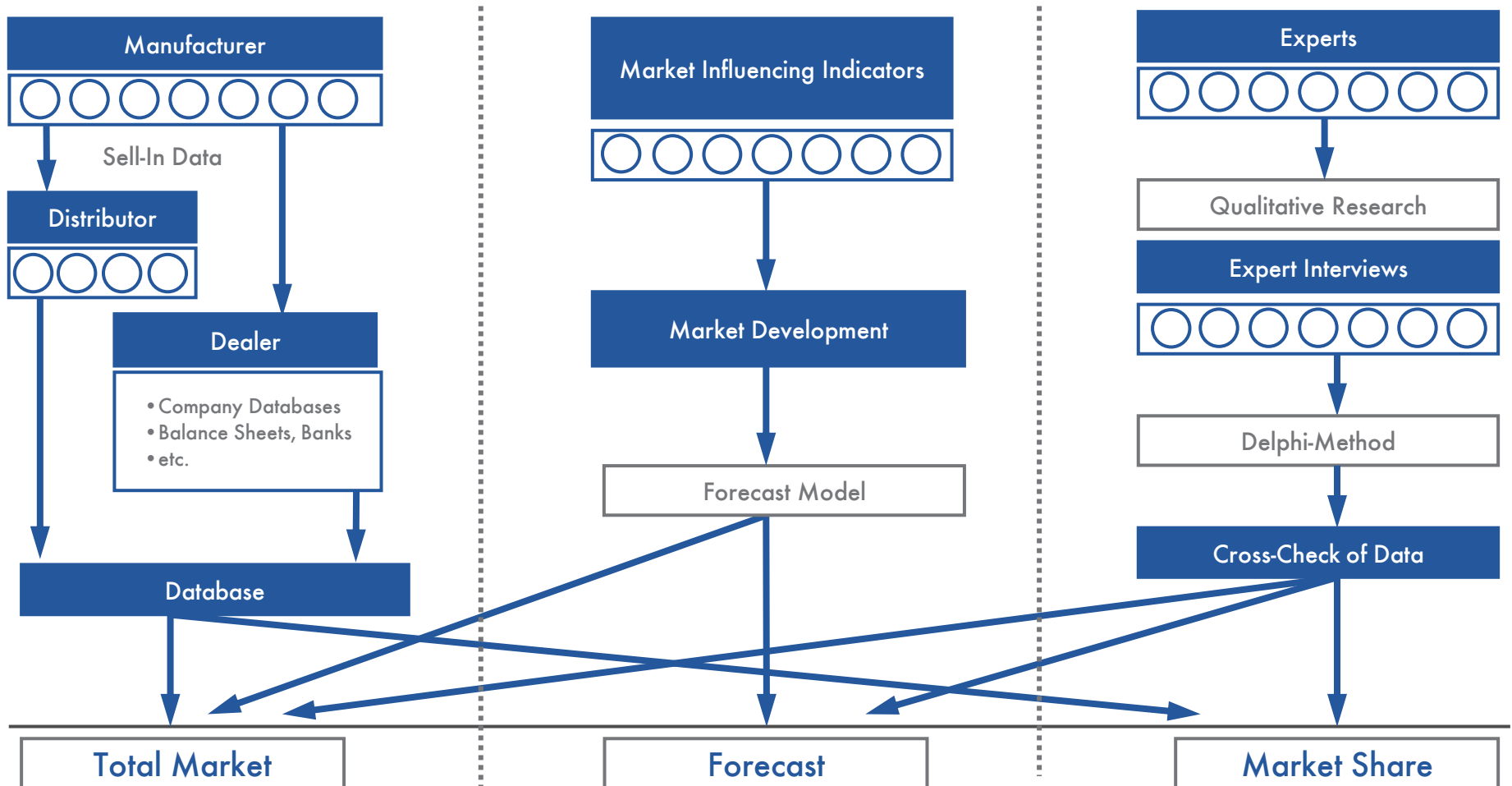
Sales are segmented by the first distribution partner.



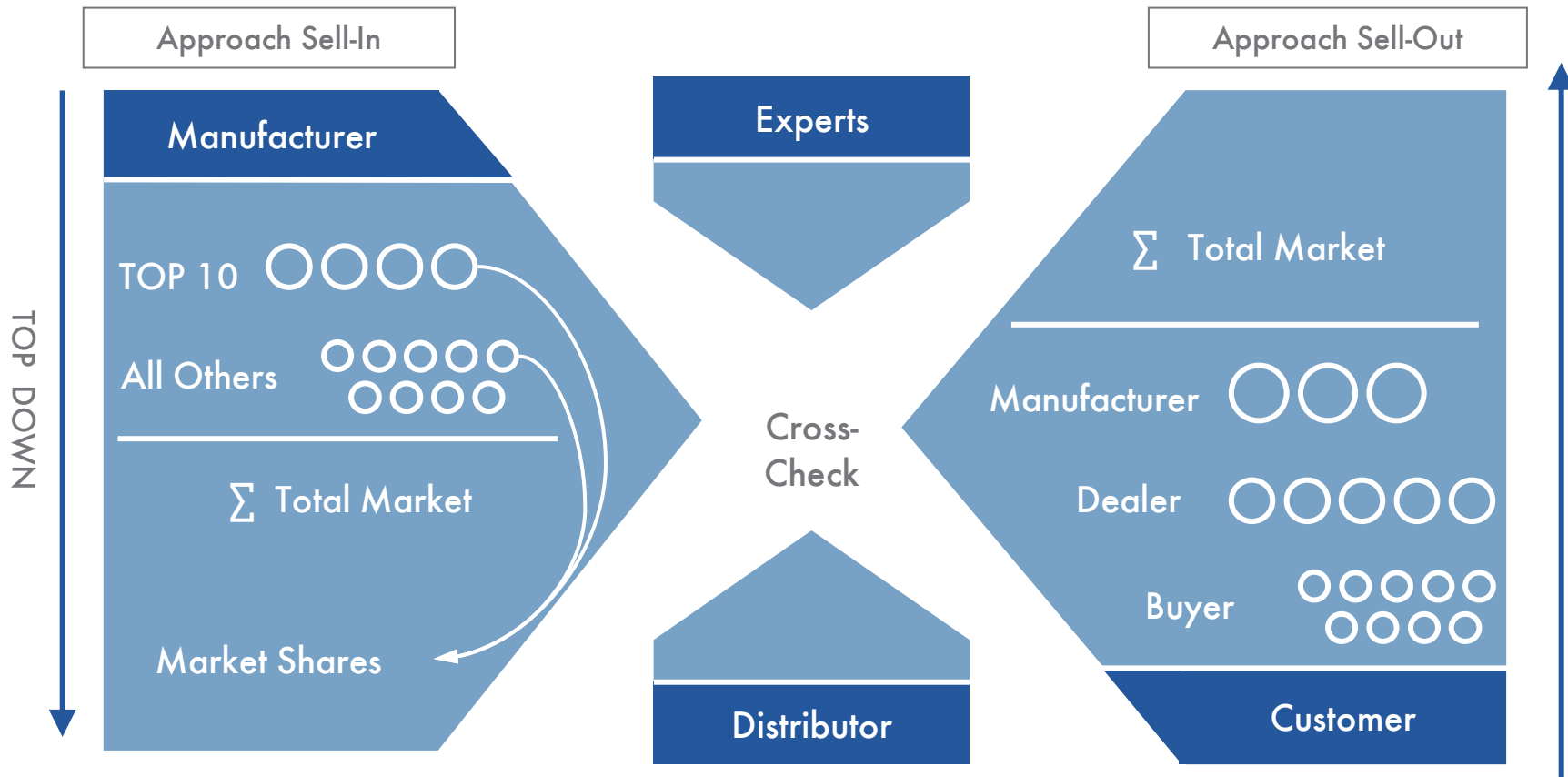
The basis for the analysis were interviews conducted with the most important manufacturers of the branches, who donated information through written questionnaires or telephone interviews. In return, cooperating companies receive parts for free, which guarantees a high rate of return.

Interviews with distributors and specialised dealers act as a cross-check of the data. In addition, investigations of listings and average prices are carried out.

# How Do We Conduct Our Research?



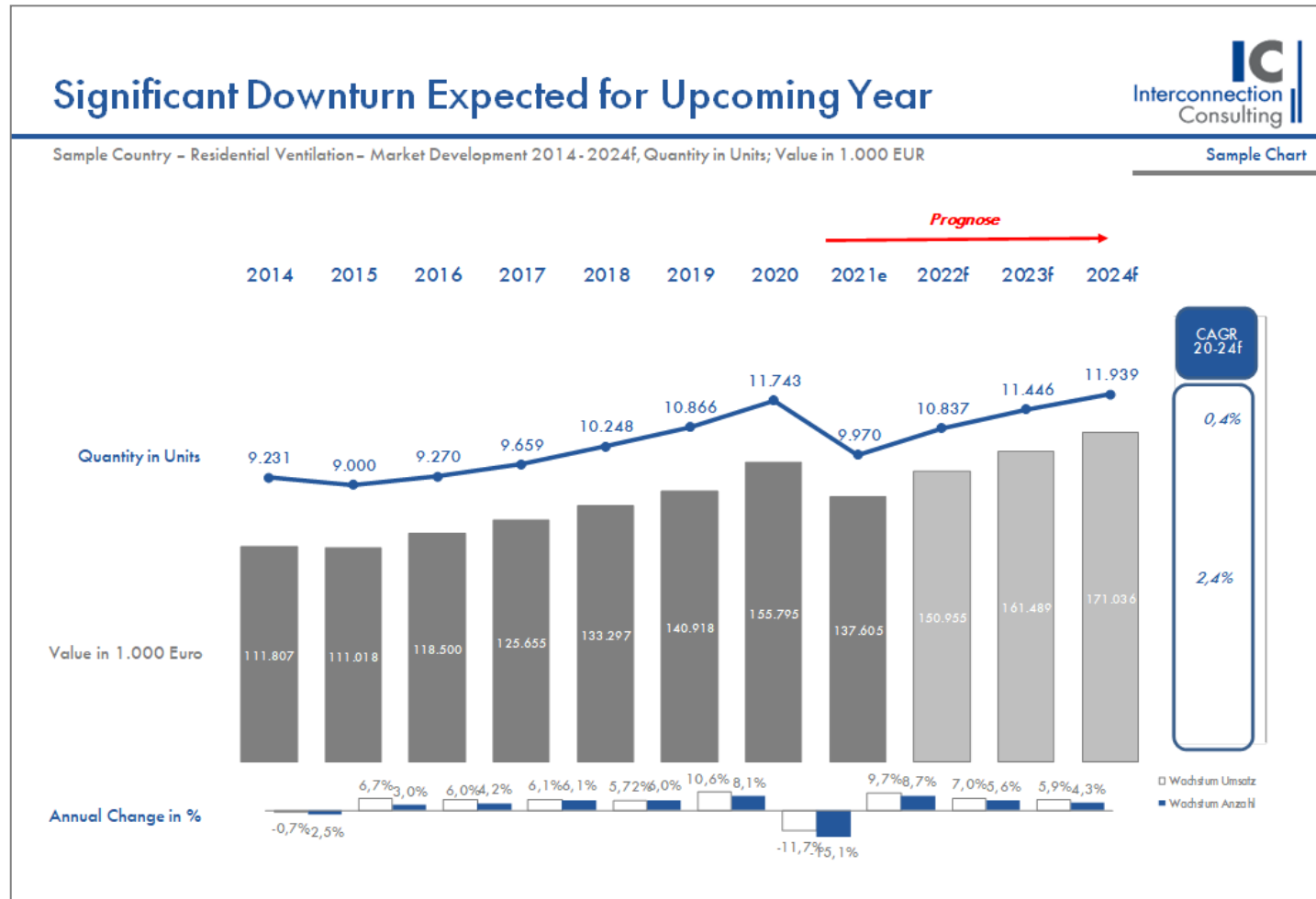
# How Do we Cross Check the Data?



# Scope of Delivery (1.) – Executive Summary as PDF Report

Residential Ventilation – Market Report

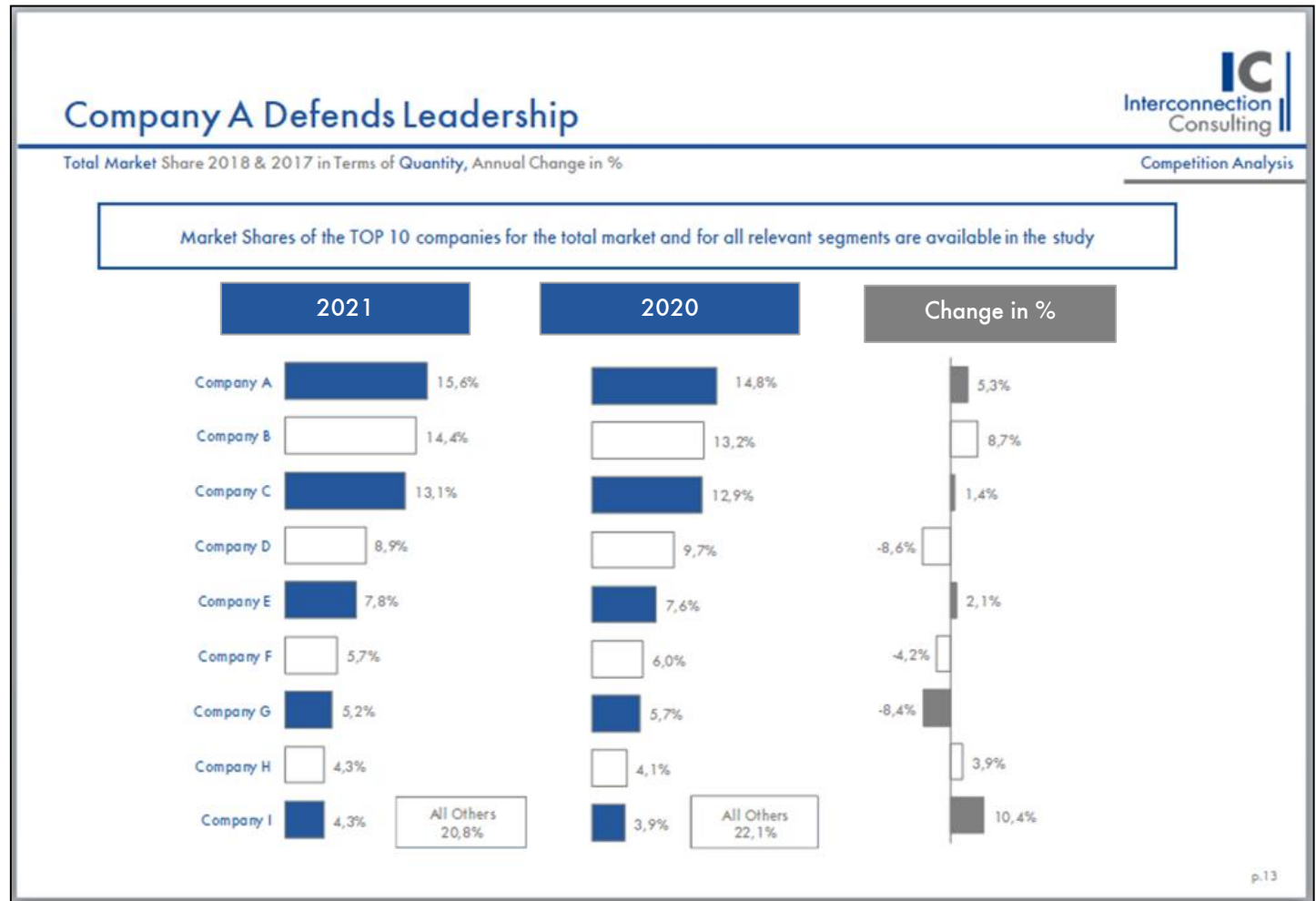
- In the Executive Summary, all essential information of the study is concisely summarized on a few pages
- *This chart shows fictitious numbers*



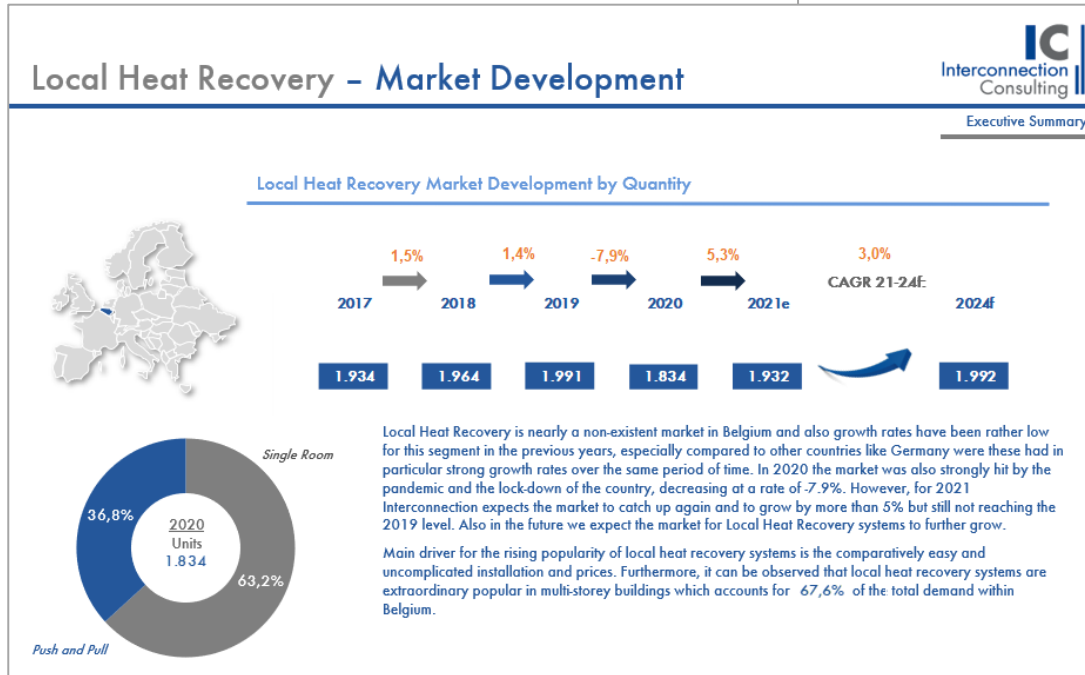
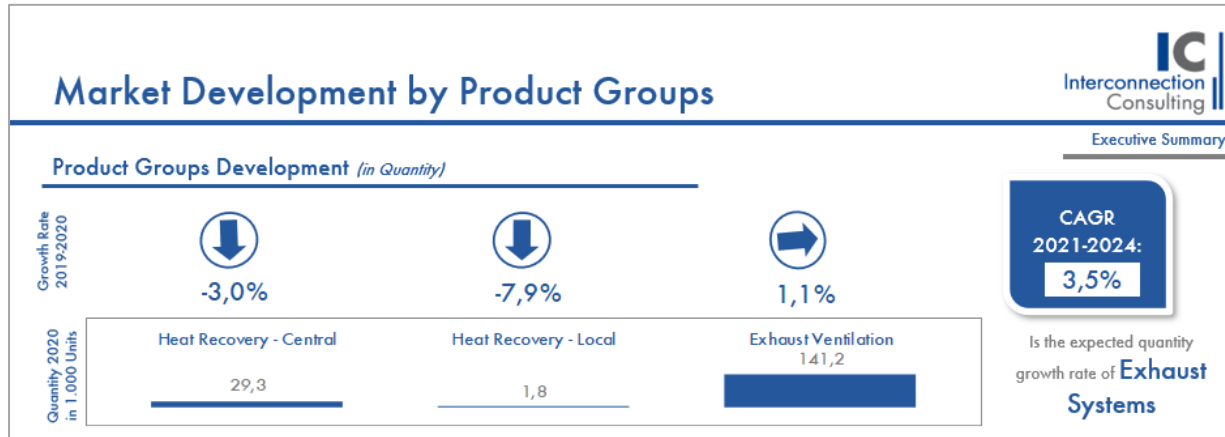
# ... Including Competition Analysis with Market Shares of Top Players

Residential Ventilation – Market Report

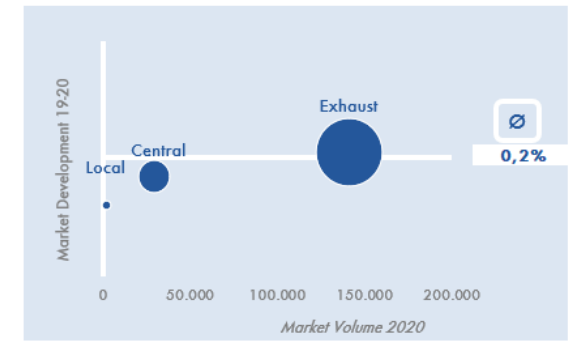
- Market Shares of the Top 10 Players for the Total Market per country/segment
- *This chart shows fictitious numbers*



# Executive Summary by Country Presenting the Key Information



on is traditionally strongly characterized by and bathrooms. In 2020, this market has units accounting for 81,9% of the market. As well as rising thickness of building structures, energy saving potential as well as rising promoted the development of heat recovery ventilation accounts for 17,0% of the market these units cover 43,0% of the market. As per strict, there is barely a market for Local the market for central HRV is rather strong, ies. y units account only 1,1% of the market.



*This chart shows fictitious numbers*

# Market at a Glance for Each Product Group Separately

## Exhaust Ventilation Systems - Forecast Data at a Glance

Executive Summary

Total Market Exhaust Systems without HRV	2017	2018	2019	2020
Value in Mio €	8,0	8,6	8,4	8,7
Quantity in 1.000 Units	60,4	64,2	64,4	66,6

Annual Change 19-20 in %
3,3%
3,4%

Product Groups (in 1.000 Units)	2017	2018	2019	2020
Central without HR	0,5	0,5	0,4	0,4
Decentral without HR	60,0	63,8	64,0	66,2

Annual Change 19-20 in %
-0,7%
3,4%

Share 2020
0,7%
99,3%

Building Type (in 1.000 Units)	2017	2018	2019	2020
One Family Dwelling	11,5	11,2	10,8	11,0
Two Family Dwelling	4,1	4,0	3,8	3,9
Multi Storey Building	44,9	49,1	49,8	51,7

Annual Change 19-20 in %
2,4%
2,2%
3,7%

Share 2020
16,6%
5,8%
77,6%

Distribution (in 1.000 Units)	2017	2018	2019	2020
2-Step	32,0	34,3	35,8	37,3
3-Step and Others	28,5	29,9	28,6	29,3

Annual Change 19-20 in %
4,2%
2,4%

Share 2020
56,0%
44,0%

Business Segment (in 1.000 Units)	2017	2018	2019	2020
New Construction	28,2	31,0	29,8	29,8
Renovation	32,2	33,2	34,7	36,8

Annual Change 19-20 in %
0,1%
6,2%

Share 2020
48,3%
51,7%

*This chart shows fictitious numbers*

## (2.) Scope of Delivery also Includes a Pivot table in MS Excel

- In addition to the visualized report, a pivot table will be delivered.
- With the help of this analysis tool, the study buyer can independently make a selection from the available data and thus compare market developments by year and segment.
- Pivot tables are available for competitor analysis as well as for the overall market and forecasts.

### How to use Pivot Tables

1. Generally, the desired sub-categories (i.e. Technology - A) can be selected with the ordinary drop down menus.

Technology	A
Distribution	(All)
Quarter	4
Quantity/Value	Quantity
Weight Classes	(All)
Country	Germany
Brand	(All)
Ø Price in € (Classes)	(All)

Sum - #	
Segments	Results
Segment A	18.592
Segment B	8.434
Segment C	5.310
Segment D	3.290
Segment E	1.332
Total	36.958

2. If you want to analyse a different category (i.e. Technology), click on the gray field and drag it down to the table.

Distribution	(All)
Quarter	4
Quantity/Value	Quantity
Weight Classes	(All)
Country	Germany
Brand	(All)
Ø Price in € (Classes)	(All)

Sum - #	Technology		
Segments	A	B	C
Segment A	3.290	5.452	7
Segment B	5.310	8.925	21
Segment C	8.434	10.794	
Segment D	18.592	14.624	13
Segment E	1.332	2.229	6
Total	36.958	42.025	47

*This chart shows fictitious numbers*



# Scope of Delivery (3.) The IC Cockpit-Solution

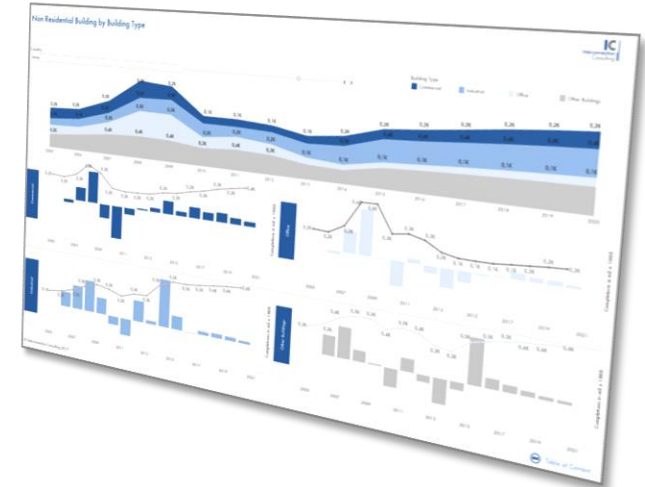
## Interactive Processing of the Data as an Online-Tool

A picture is more than  
1000 words

- Complex relationships are clearly **visualized** in the form of geographic maps, tree maps, stacked bars, etc.

Interactive Dashboards

- Use **interactive dashboards** for the rapid implementation of the data, for potential estimates, for **sales management**, for **measuring success** and **target setting** for your field service team, etc.



Easy Online Access

- Market data is everywhere available, where you have access to internet;
- In addition you can download **pictures**, **CSV-** or export **PDF data**

The cost of the software license is already included when purchasing two or more country reports. If we only refer to one region, we visualize the market report in a PDF document instead of in Tableau;

# Table of Contents - With Just a Few Clicks, You Get Exactly the Information You Need at the Moment

## TABLE of CONTENTS

Market Analysis	
Total Market	>
Total Market - Map	>
Product Groups - Overview	>
Central HRV - Detailed	>
Local HRV - Detailed	>
Exhaust Ventilation - Detailed	>
Business Segment	>
Building Types	>
Distribution Channels	>
Competition Analysis	
Product Groups - Overview	>
Central HRV	>
Local HRV	>
Exhaust Ventilation	>
Product Groups - IC Dynamic Portfolio	>
Business Segments / Building Types / Distribution	>
Central Heat Recovery by Capacity	>



Company Profiles	
Company Profile I	>
Company Profile II	>
Market Environment (Seperate Table of Contents)	
GENERAL ECONOMY & CONSTRUCTION Industry	>
Executive Summary	
Market Value	>
Market Quantity	>
Product Group Splits	>
Country + Product Group Overview	>
Total Market Overview I	>
Total Market Overview II	>
Market at a Glance	>

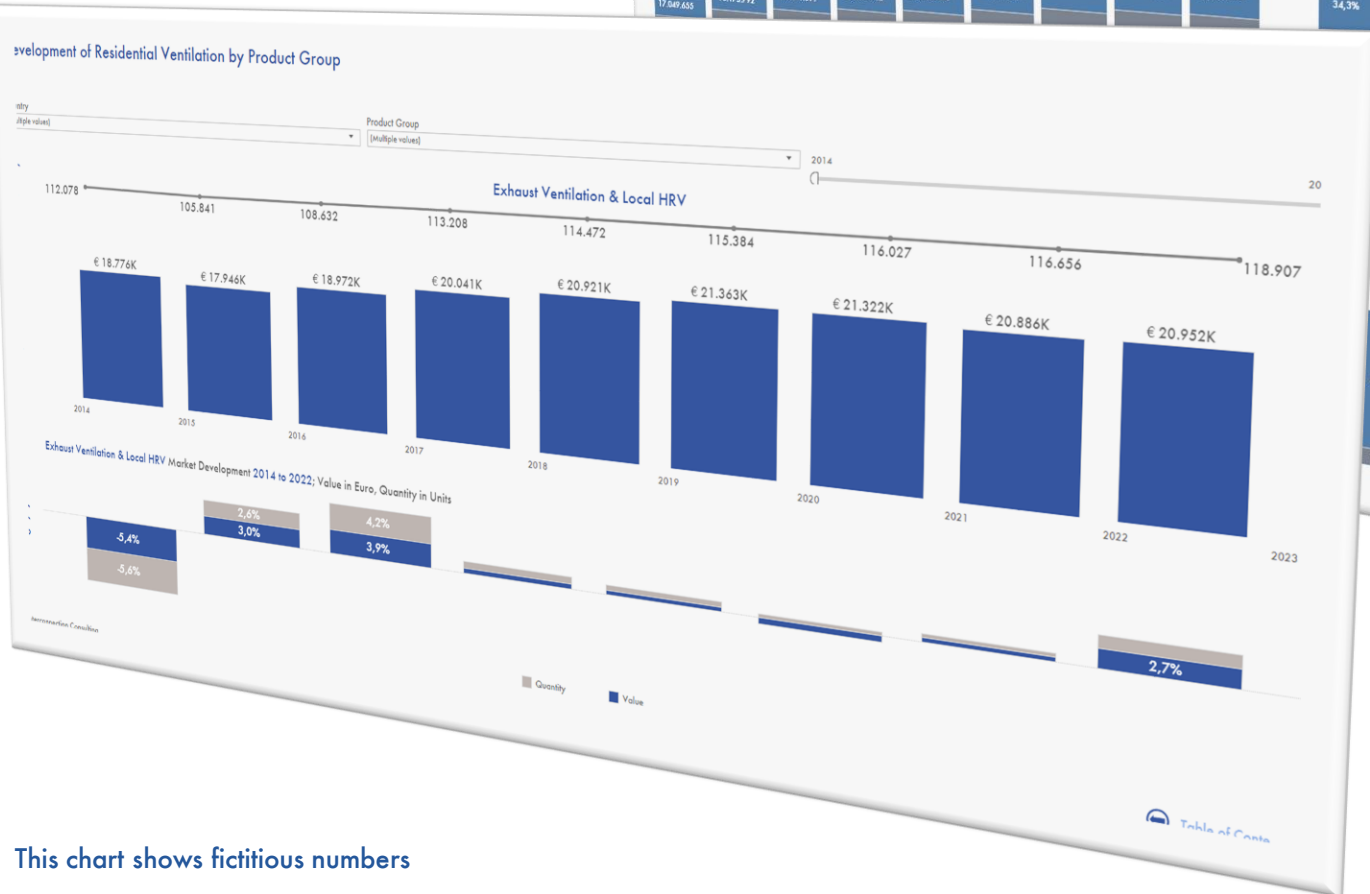
# You Can See at a Glance ...

## ... Which Markets and Product Groups Are Developing Best



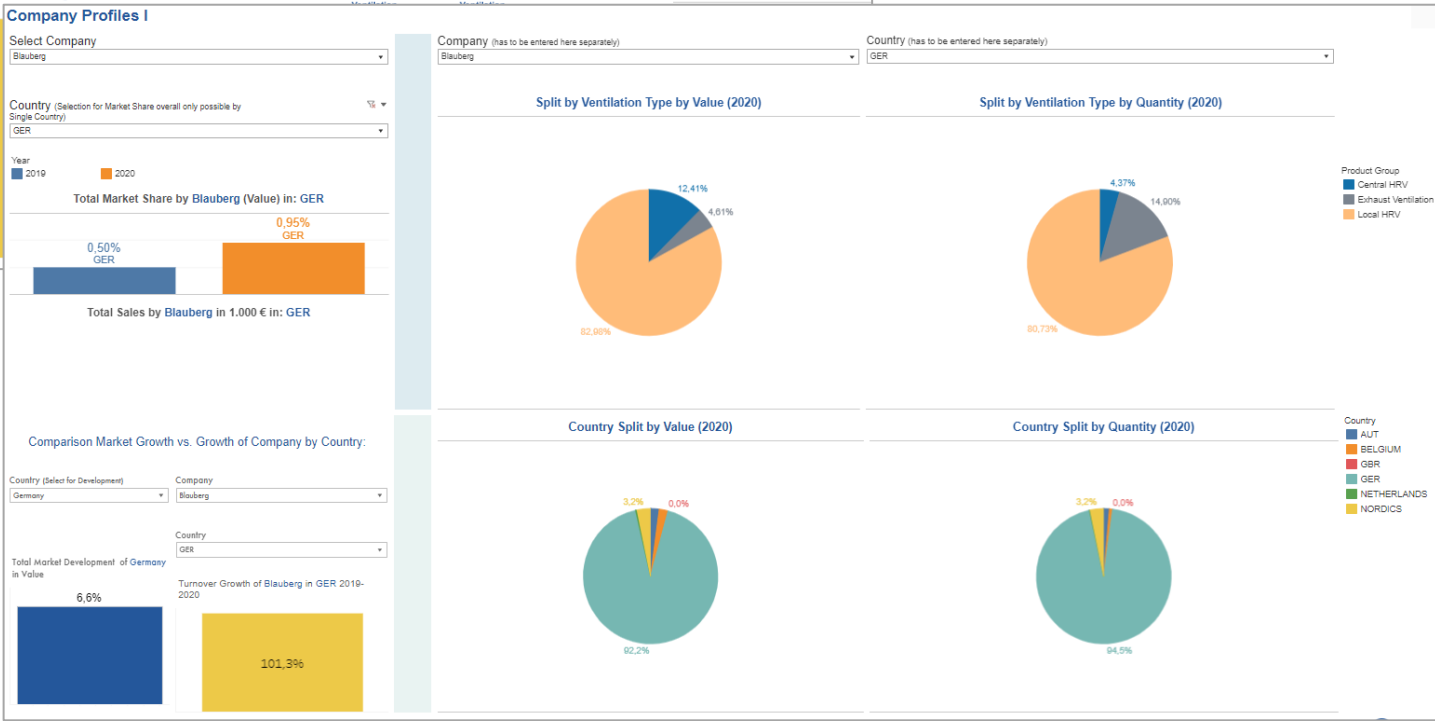
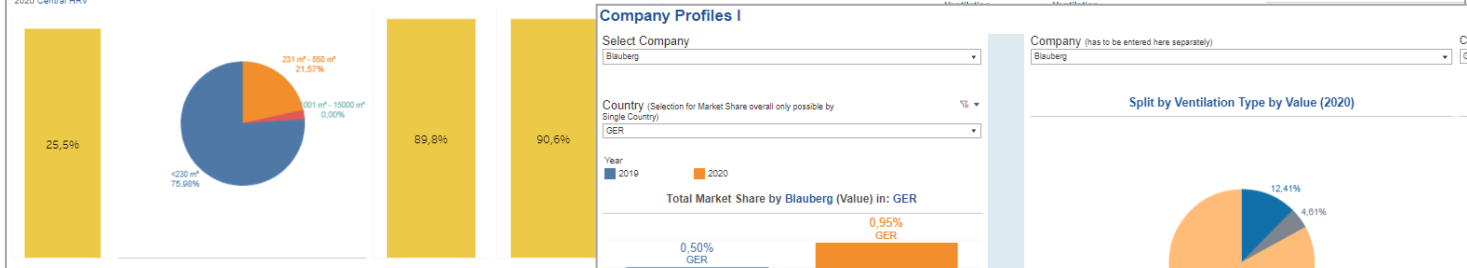
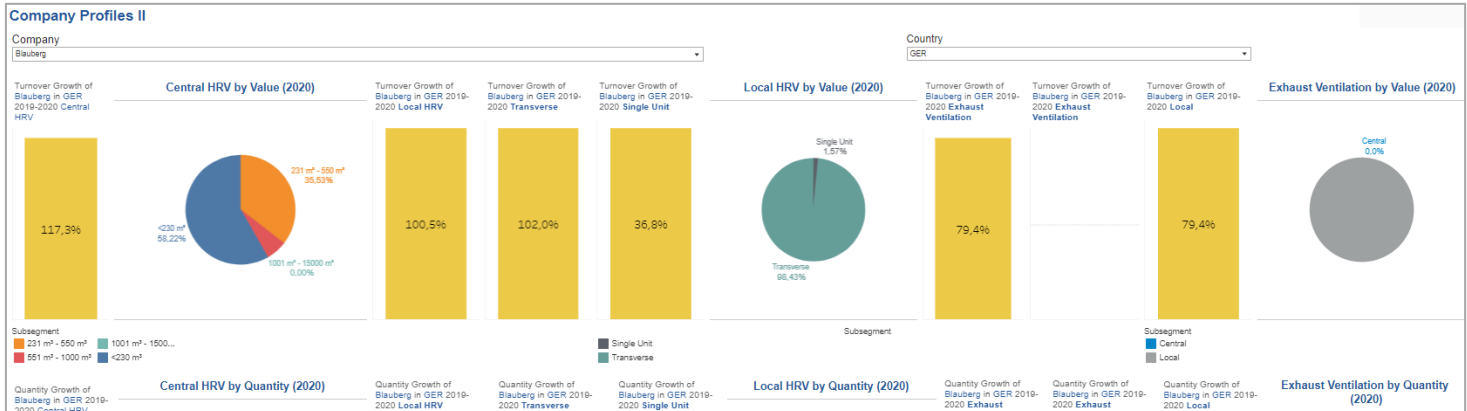
This chart shows fictitious numbers

# ... How Big Certain Market Segments and Average Prices Are and How They Develop



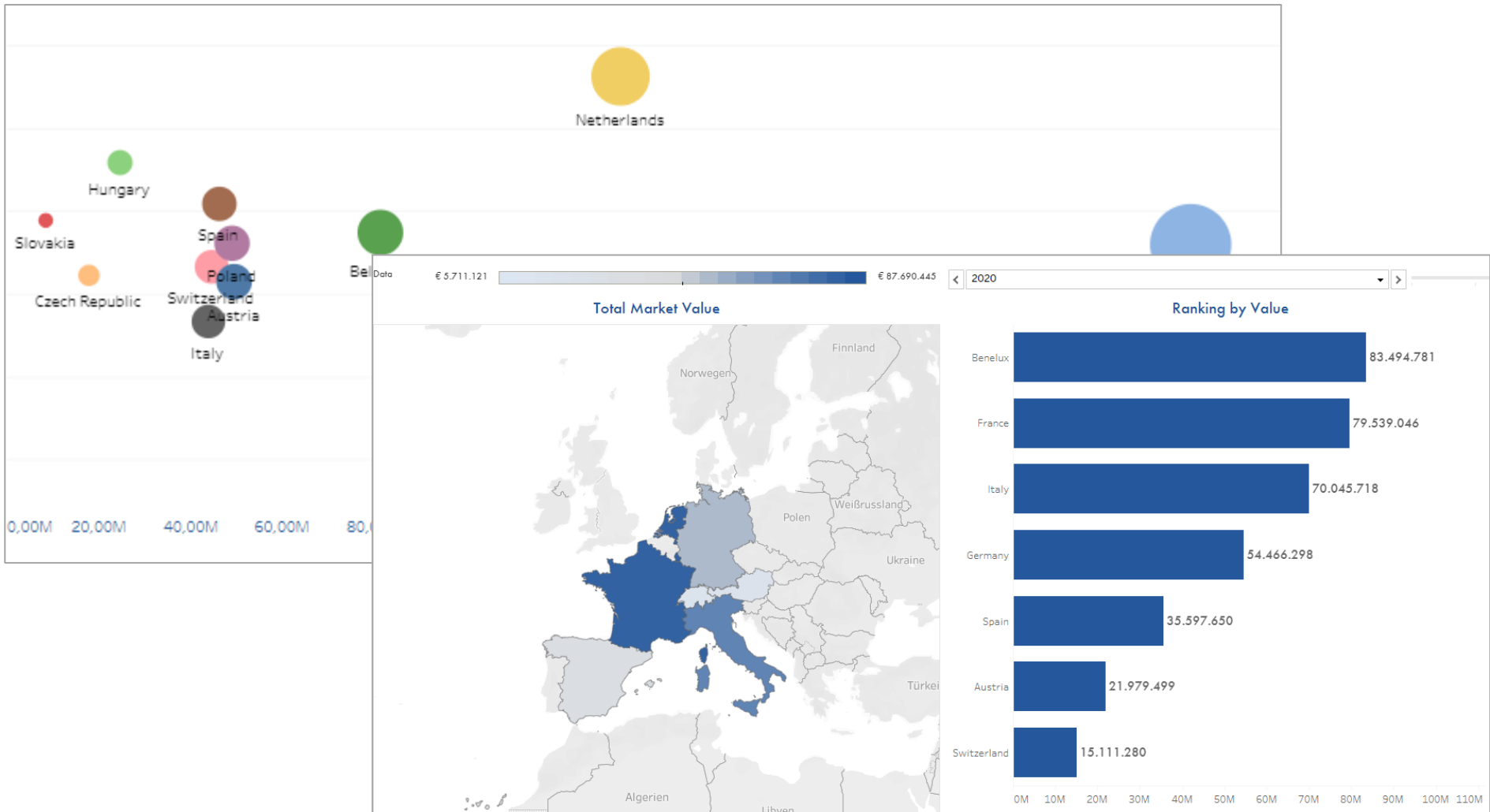
This chart shows fictitious numbers

# Company Profiles for Assessment of Competition



This chart shows fictitious numbers

# We also Visually Emphasize the Importance of Different Markets so that even Large Amounts of Data Remain Easy to Understand and Present



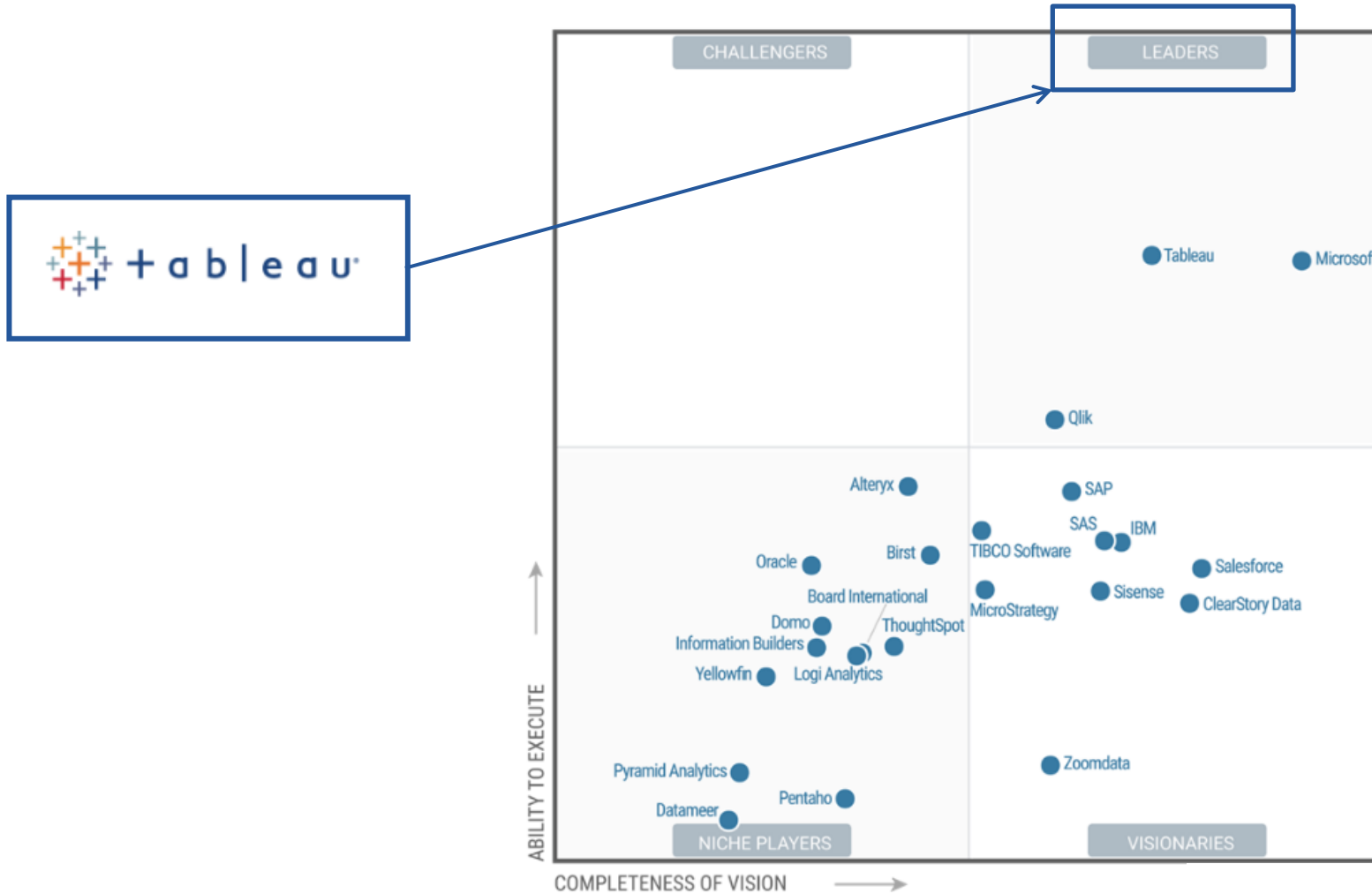
This chart shows fictitious numbers

# We Show Who Is the Most Important Player Overall, as Well as in Different Segments, and Who Wins or Loses Market Share



This chart shows fictitious numbers

# Visualization with the Best Business Intelligence Tool on the Market



Source: Gartner Magic Quadrant for Business Intelligence and Analytics, 2017



## Subscription

Price per Country

€ 3.950

3 countries \*\*

€ 10.073

5 countries \*\*

€ 15.800

7 countries \*\*

€ 19.355

10 countries \*\*

€ 27.650

## Available Countries

GER

AUT

SUI

FRA

GBR

ESP

NORDICS

ITA

BEL

NED

POL

CZE

SVK

## Scale of Discounts

from a purchasing price of:

€ 7.500	-10%
€ 10.000	-15%
€ 15.000	-20%
€ 20.000	-30%

If you are interested to purchase the reports only as a single issue basis, please contact the responsible consultant:  
 Andreas Erdpresser  
[erdpresser@interconnectionconsulting.com](mailto:erdpresser@interconnectionconsulting.com)  
 Tel.: +43 1 585 46 23 - 31

\* **IC Subscription:** Unit price if the study is obtained at least twice (order year and subsequent year). The subscription can be cancelled after two purchases of the study, but not later than 31st December in the year in which the last study has been received. Interconnection Consulting will announce price changes no later than 6 weeks before the end of the year. In the event of non-termination, the annual subscription is always extended by another year.

\*\* Price Special taking into account already scale of discounts.

Price includes access to the online cockpit solution with all data from the study. From the purchase of at least two countries, the license costs are included. When purchasing only a single region, the data is visualized as a PDF document;

# Interconnection Provides Data for Corporate Decisions



# Our Market-Intelligence Tools



# Chosen References

„The IC Market Tracking® Residential Ventilation Systems was very helpful to understand the German residential ventilation market. It offers a deep insight into product group segmentation and comes very handy in usage.“

Ulf Hörman  
Business Development Director, Swegon SE

## Customers of our Report on Residential Ventilation Systems



If there are any questions please  
do not hesitate to contact us!

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Fax: +43 1 5854623 -30

[erdresser@interconnectionconsulting.com](mailto:erdresser@interconnectionconsulting.com)



we show you the way

## Yes, we would like to order the IC Market-Tracking® Residential Ventilation in...

(Please, print out the order form and mark your desired products)

Please select from the available countries

- |                                      |                                  |   |
|--------------------------------------|----------------------------------|---|
| <input type="checkbox"/> Germany     | <input type="checkbox"/> Austria | <input type="checkbox"/> Switzerland    |
| <input type="checkbox"/> France      | <input type="checkbox"/> Italy   | <input type="checkbox"/> Belgium        |
| <input type="checkbox"/> Netherlands | <input type="checkbox"/> UK      | <input type="checkbox"/> Poland         |
| <input type="checkbox"/> Spain       | <input type="checkbox"/> Nordics | <input type="checkbox"/> Czech Republic |
| <input type="checkbox"/> Slovakia    |                                  |   |

Subscription \* Single country – Price/Year: ..... EUR 3.950,-

Subscription \* Full Package all countries – Price/Year *(under consideration of scale of discounts)*: ..... EUR 35.945,-

	Single Issue	Subscription*
25% price advantage		✓
IC Cockpit – Online Dashboard Solution	✓	✓
Full Flexibility – Within the sum of the subscription available country reports can be changed without any additional costs		✓
Web-Conference with the analyst free of charge		✓

In case of interest for a single issue of the report, please contact the responsible consultant:  
 Andreas Erdpresser – erdpresser@interconnectionconsulting.com – Tel.: +43 1 585 46 23 - 31

**Billing Address:**  
 (please fill in the data completely)

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Company: \_\_\_\_\_  
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Date \_\_\_\_\_ Name \_\_\_\_\_ Signature \_\_\_\_\_

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The price is the individual price for at least two orders of the study (order year and the following year). Price changes must be announced by Interconnection at least six weeks before 31<sup>st</sup> December. The subscription can be cancelled after two purchases of the study, but not later than 31<sup>st</sup> December in the year in which the last study has been received. If the subscription is not cancelled, it is extended by one more year.

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#### Scale of discounts

from 7,500.- EUR	10%
from 10,000.- EUR	15%
from 15,000.- EUR	20%
from 20,000.- EUR	30%