



IC Market Tracking
Residential Ventilation
Systems Worldwide
2018

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- ✓ You will receive an overview of the **overall market** in addition to **individual market segments**.
- ✓ **Market Forecasts** for all product segments and regions for the upcoming three years, based on our econometric models.
- ✓ Awareness of **Market Position** and development during the last two years, in comparison with 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** of the results facilitates the development of your own strategies.



Residential Ventilation Systems Worldwide 2018

Regions Available

| | | | | |
|--------|---------------|--------------|---------------|-------------|
| Europe | North America | Asia-Pacific | Latin America | Middle East |
|--------|---------------|--------------|---------------|-------------|

Heat Recovery – Central

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

Heat Recovery - Local

| Installation Type | Device Type |
|-------------------|-------------|
| Window | Single Unit |
| Wall | Transverse |

Exhaust Ventilation

| |
|-----------------|
| Central Exhaust |
| Local Exhaust |

Product Group by...

Product Group by...

Product Group by...

Product Group by...

Business Segment

| |
|------------------|
| New Construction |
| Renovation |

Distribution

| |
|--------|
| 2-Step |
| 3-Step |

Building Type

| | | |
|---------------------|---------------------|-----------------------|
| One Family Dwelling | Two Family Dwelling | Multi Storey Building |
|---------------------|---------------------|-----------------------|

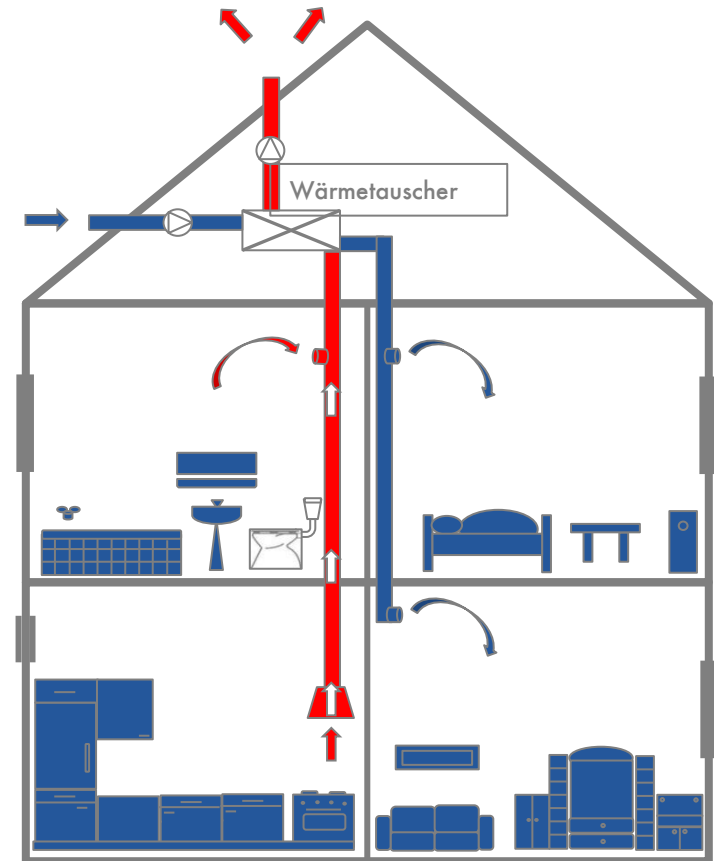
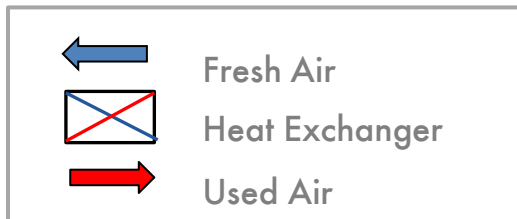
The Study Contains Market Shares of 2016-17 as well as a Market Forecast up to 2021f

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:



Size Classes

< 200 m³/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 m³/h

Typical single-family house segment

551 - 1.000 m³/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 m³/h

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

A competition analysis for individual size classes is not included.

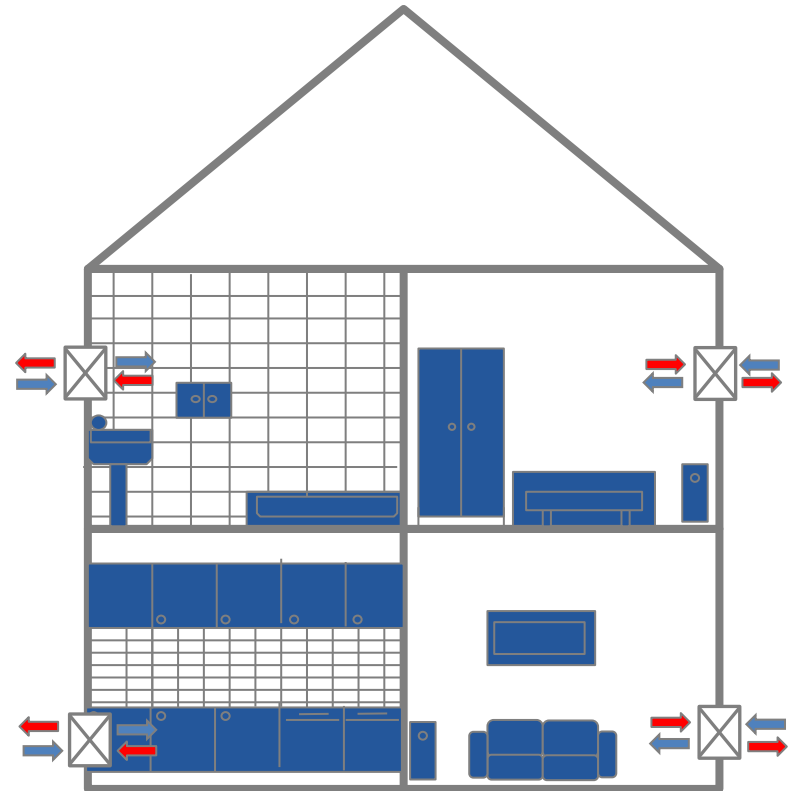
Air Handling Units with Heat Recovery – Locally Operated

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.



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.

Single Unit

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

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

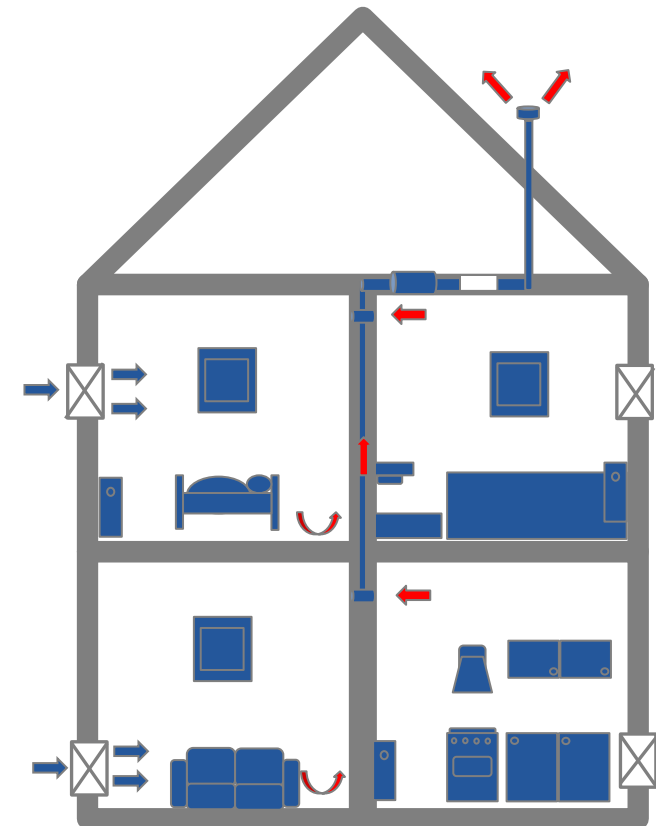
Local Exhaust

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

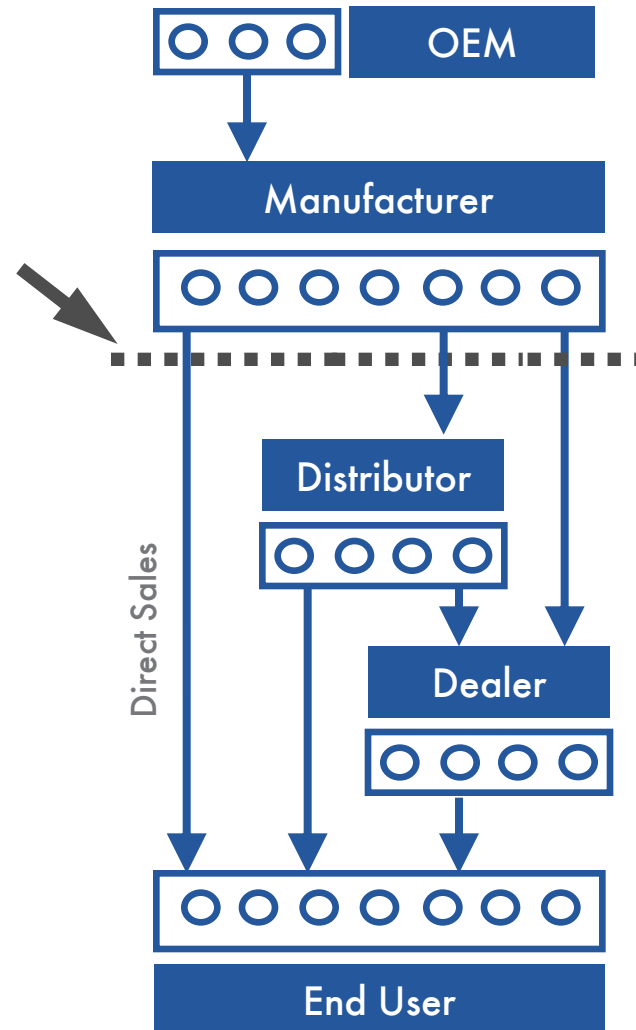


| Regions | |
|---------------|--|
| Europe | DACH Region, France, Benelux, Italy, Scandinavia, Poland |
| APAC | India, China, Japan, South Korea |
| Latin America | Brazil, Mexico, Argentina |
| Middle East | UAE, Saudi Arabia, Qatar, Kuwait, Oman, Bahrein |
| North America | USA and Canada |

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.



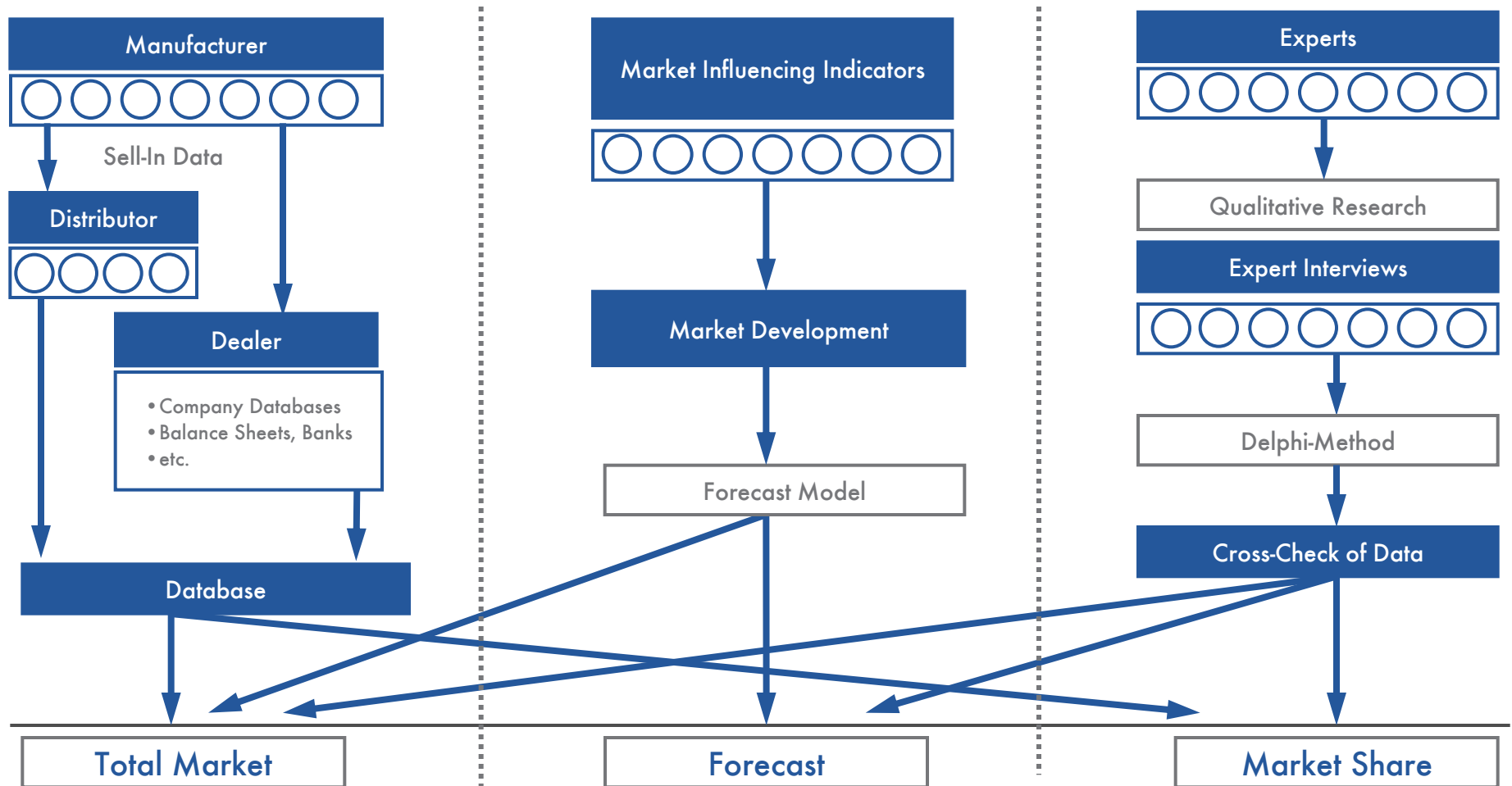
The basis for the analysis were interviews conducted with the most important manufacturers of the branches, who donated information through written questionnaires or telephone interviews. In return, cooperating companies receive parts for free, which guarantees a high rate of return.

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.

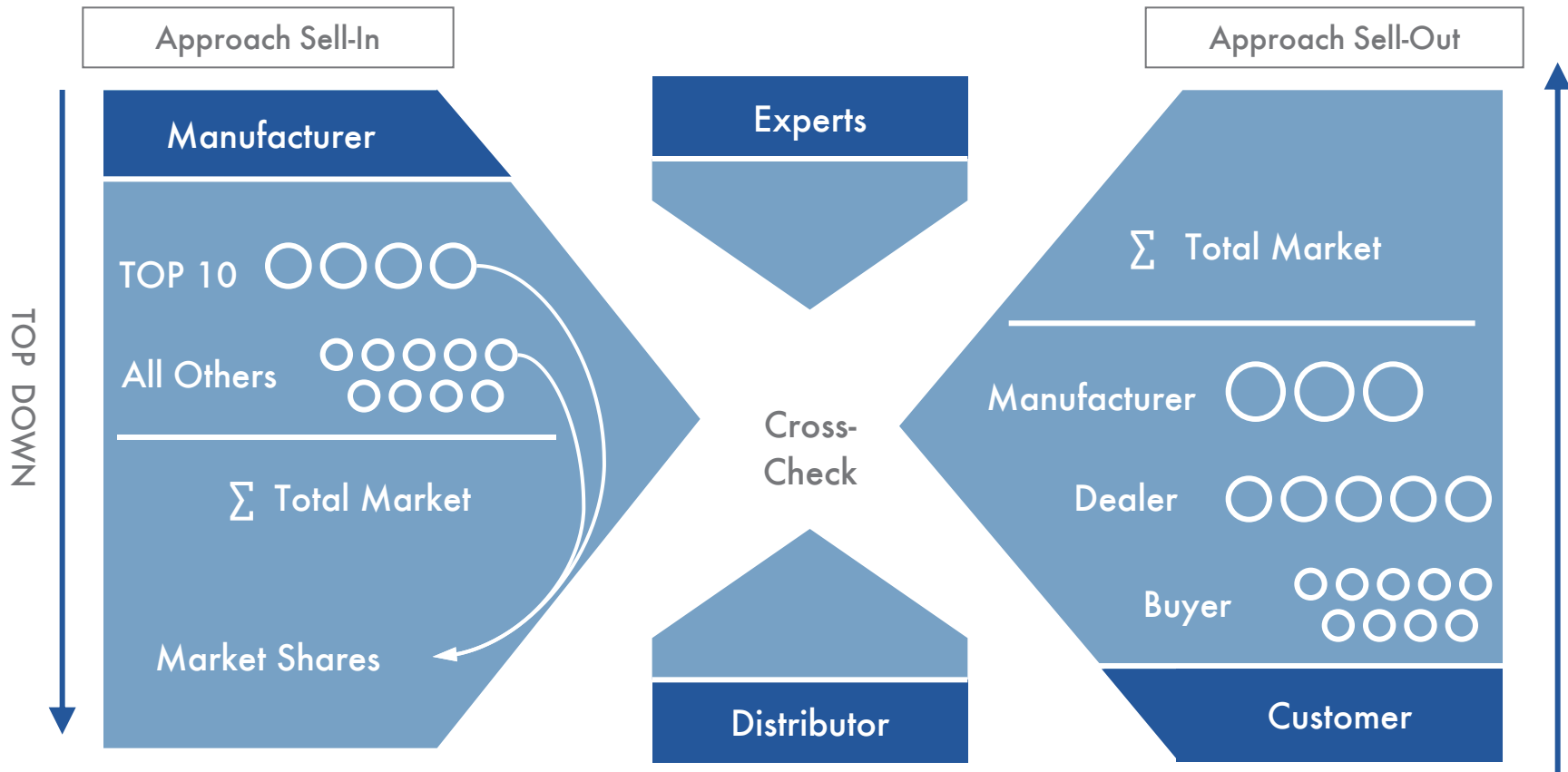
How Do We Conduct Our Research?

Description Structure of Survey Methodology

Methodology



How Do we Cross Check the Data?



The IC Market Tracking® is modularly built and consists of the following sections:

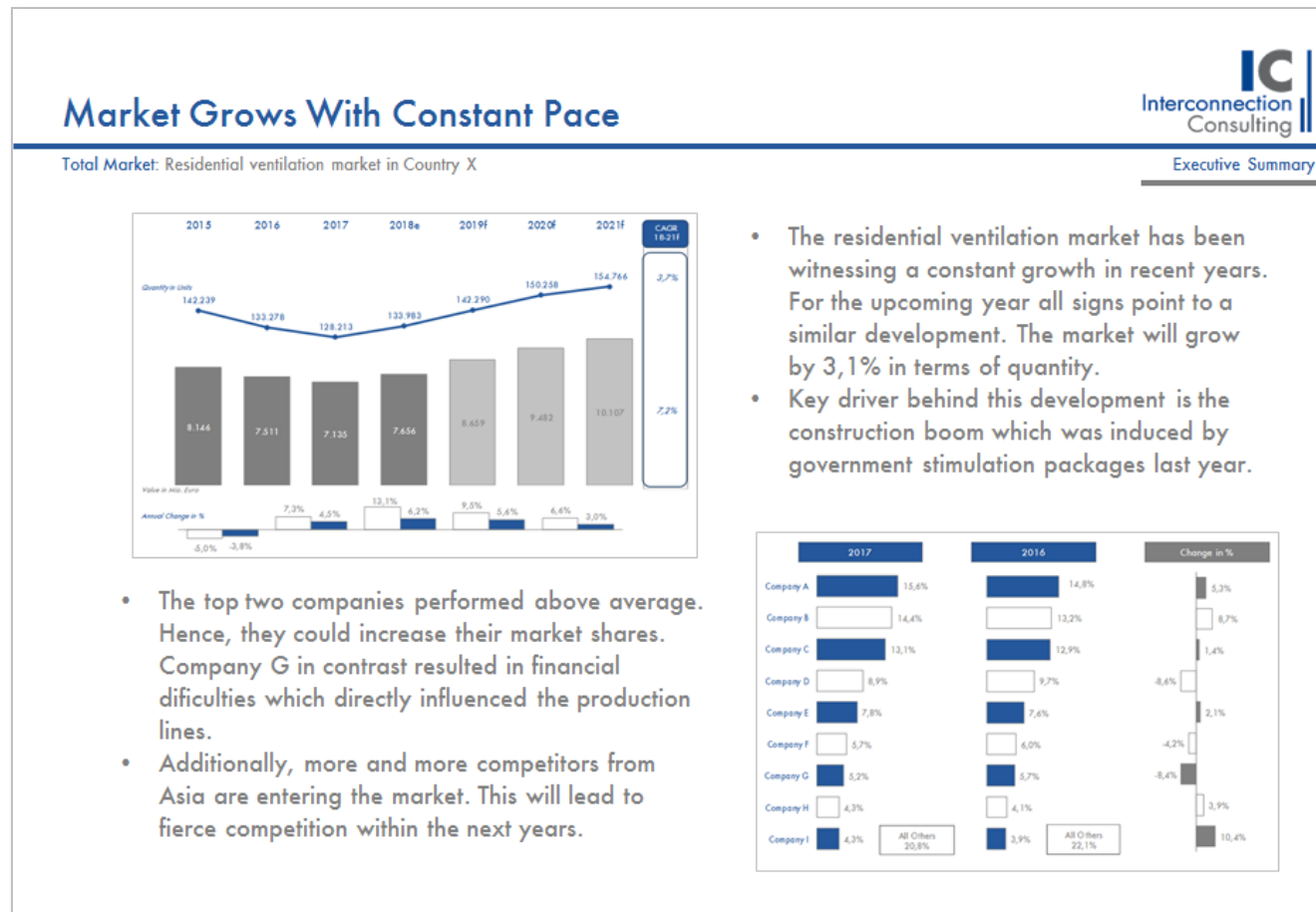
- The **Introduction** shows the definition and demarcation of product groups, regions, and methodology as well as the objectives of the study.
- The **Executive Summary** gives a short overview of the results of the study and analyses key facts.
- As an introduction key factors influencing the market are analysed in the **Economic Environment**: You will find the most important data on consumer behaviour, main economic indicators, etc.
- The **Total Market Analysis** shows the development of the market surveyed by value and quantity in different dimensions, such as regions, product groups, and ways of distribution. A forecast for the next years is an essential part of this analysis.
- The **Competition Analysis** shows in detail the development of the top companies in the market by finding out about the market shares in different categories, changes in market position, benchmarks, average prices, etc.

Content of the Report *

| | |
|--|----------------|
| 1. Executive Summary | (ca. 10 pages) |
| 2. Definition and Methodology | (ca. 5 pages) |
| 3. Market Drivers | (ca. 20 pages) |
| 4. Regional Market Analysis and Forecast | (ca. 20 pages) |
| 5. Competition Analysis | (ca. 20 pages) |
| 6. Tables, Facts and Figures | Pivot Table |

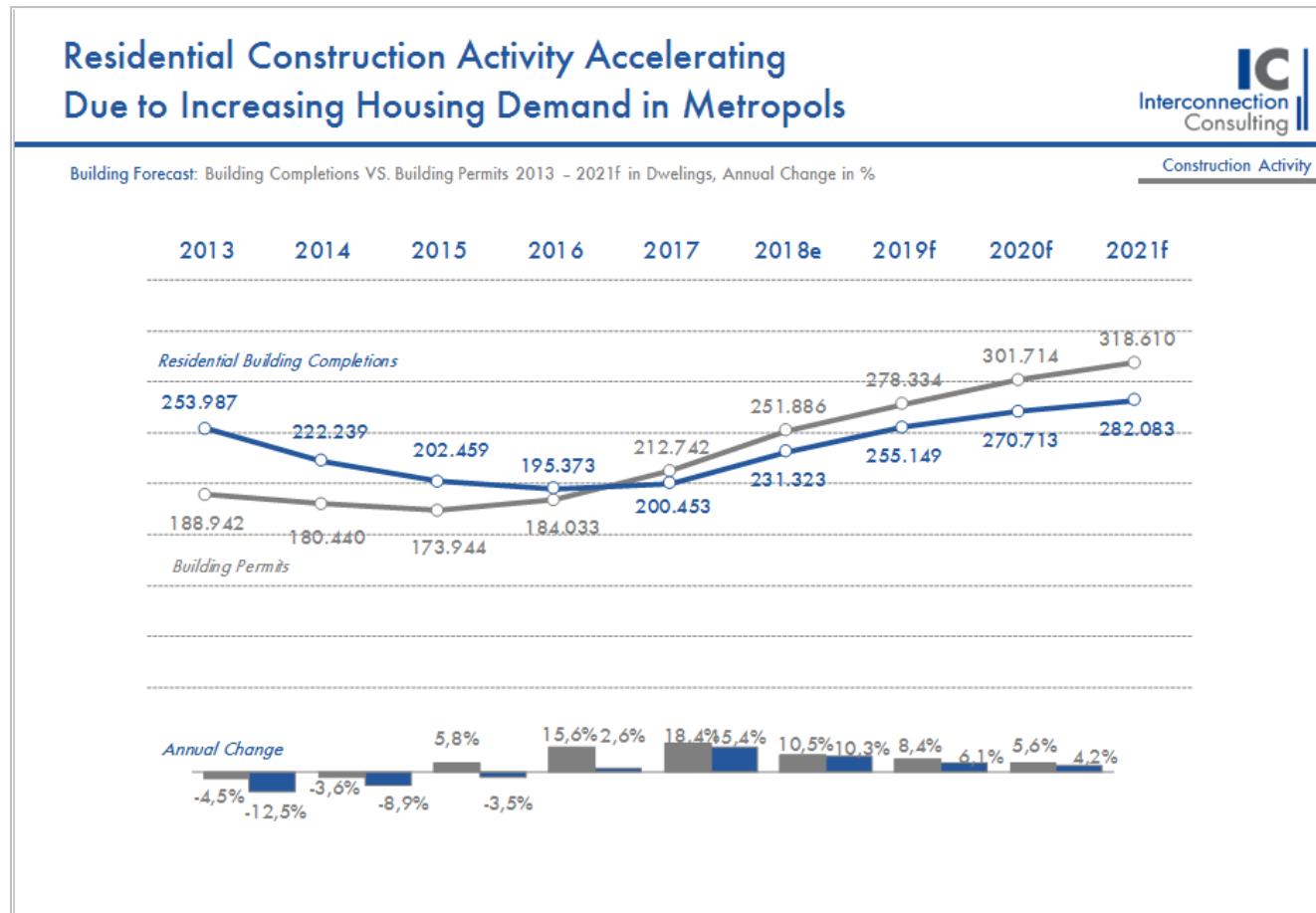
* Pages based on single country report

- The executive summary comprises all relevant information of the report in precise manner. Forecast and
- competition situation is highlighted
- *This chart shows dummy figures.*



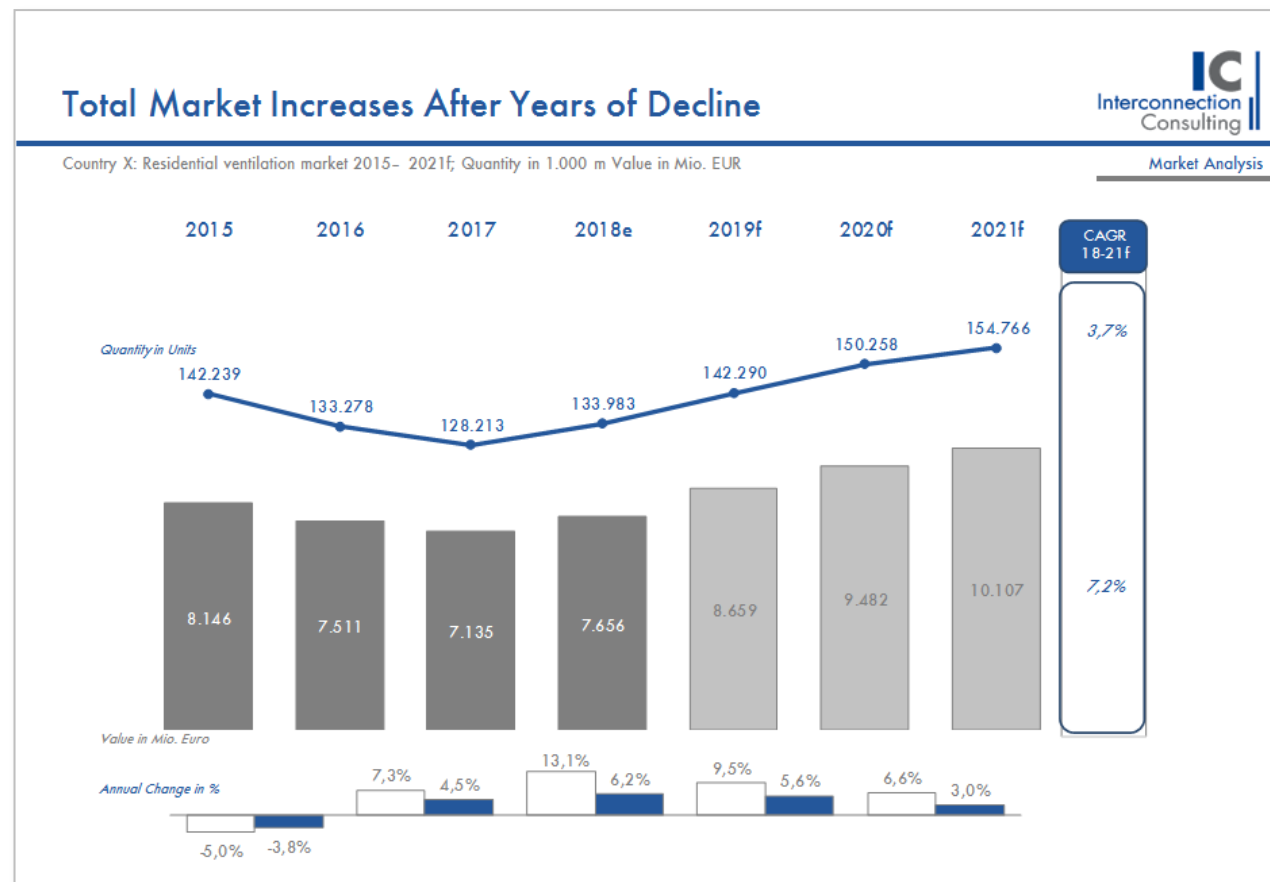
Market Environment Data of Our Forecasting Model

- The data for the market environment consists of main factors such as general economy data, demography, income statistics, construction environment and sentiment indicators.
- *This chart shows sample figures.*

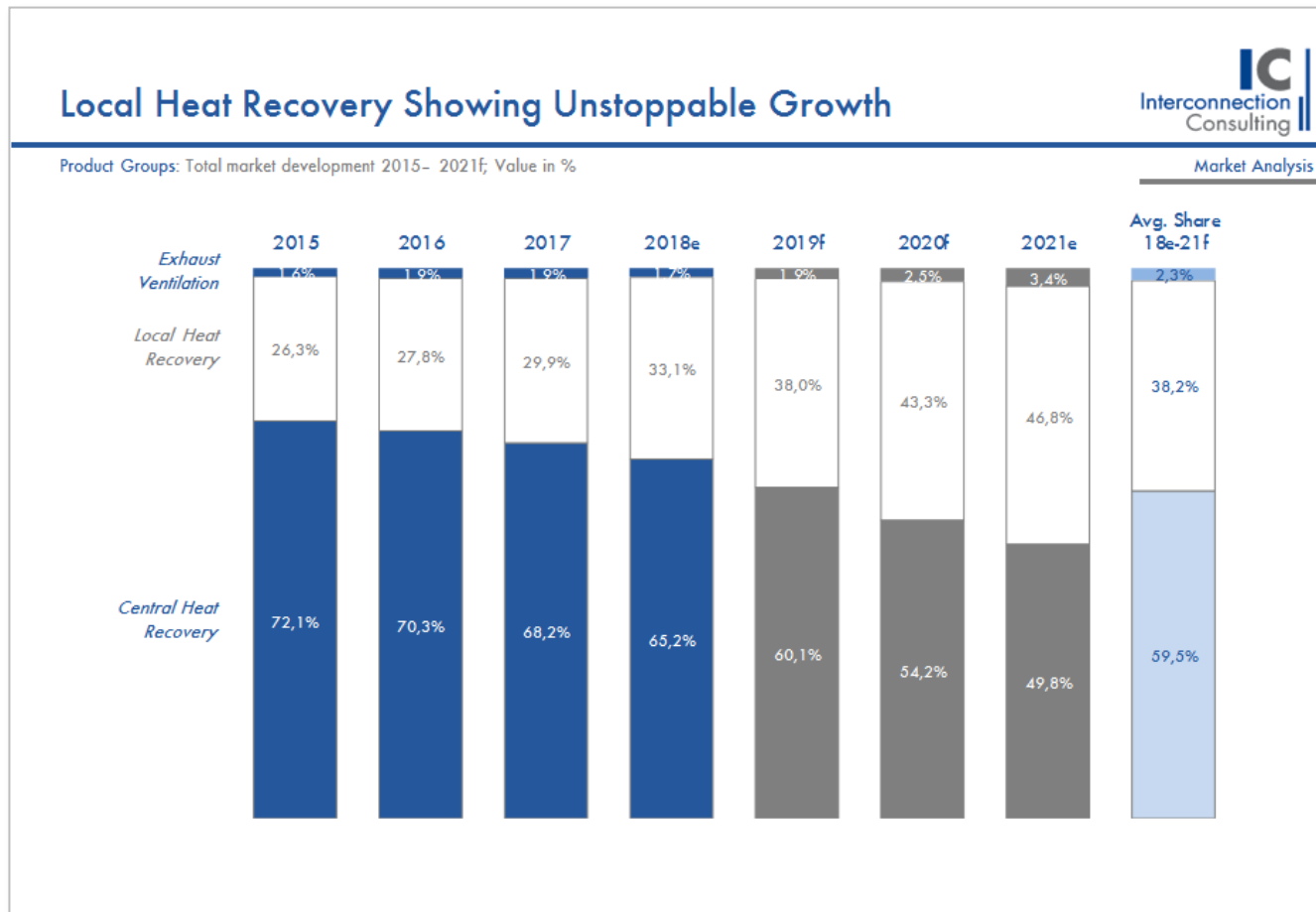


Total Market Development and Forecast

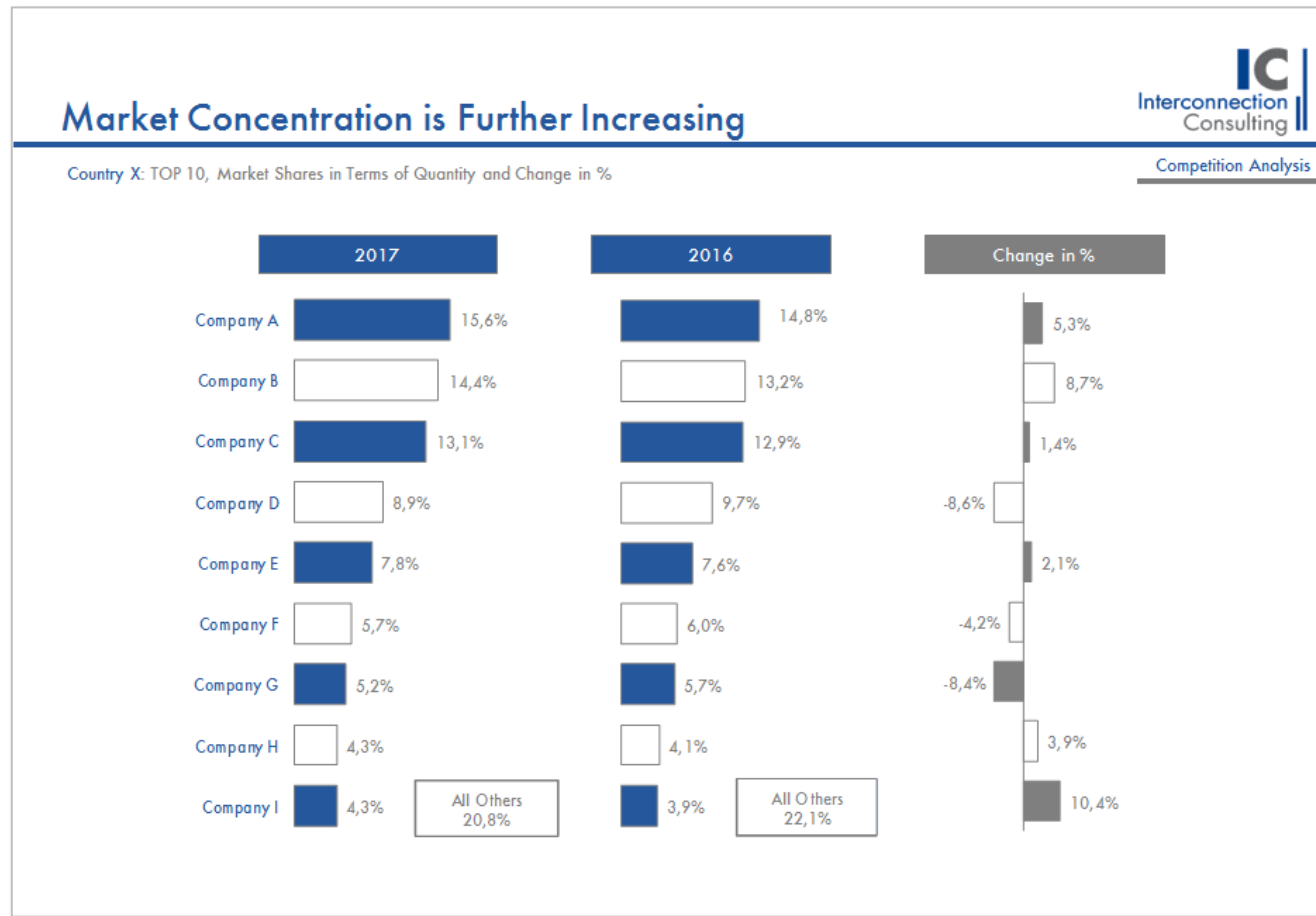
- Overview of the total market in terms of quantity and value
- Development until the current year and forecast for the upcoming three years
- *This chart shows dummy figures.*



- Overview of the Product Group Segmentation, Distribution Channels as well as a Forecast for the upcoming three years about their development.
- *This chart shows dummy figures.*



- Detailed description of the most important Companies in the examined market by reference to market shares, changes, BCG-Portfolios, etc.
- *This chart shows dummy figures.*



- In addition to the visualized report a Pivot Table will be included.
- This tool allows individual and selective analyses to be made by the user with the available data, especially when it comes to future trend and segmentation modeling.
- Pivot tables are available for the competition analysis as well as for the total market and forecast studies.

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) |
| ∅ 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) |
| ∅ 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 |

Investment Plan for Your Market Research

| | Single Issue | IC Subscription* | Scale of Discounts | |
|---------------|--------------|---|--------------------|------|
| Single Region | € 2.950,- |  | € 5.000 | -10% |
| All Regions** | € 11.800,- | | € 7.500 | -15% |
| | | | € 10.000 | -20% |

| Available regions | Europe | North America | Asia-Pacific | Latin America | Middle East |
|-------------------|--------|---------------|--------------|---------------|-------------|
| | | | | | |

* **IC Subscription:** 20% price advantage compared to single issue. 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. If the subscription is not cancelled, it is extended by one more year. 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 31st December.

** **Price Special** taking into account the scale of discount
Price includes an interactive PDF Document. All prices shown exclude sales tax

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- **Annually updated reports** on fixed dates
- One time a year **free web conference** with the Analyst of the report (presentation of key results, background information, answering of questions)
- **Info-Hotline**: answering of questions with regards to the report and on methodological issues relating to market research
- **Flexible subscription packages**: 2-year intervals, alternating countries, product change, etc., if possible. Conditions on request
- **Easy termination**: After 2 issues each subscription can be terminated easily

- Interconnection is the leading institute for market data in the HVAC industry.
- Our studies support the leading companies in defining targets and marketing strategies, including competition monitoring and control of marketing actions.
- Interconnection draws its Know-how from over 100 international market studies per year and a number of Ad-hoc studies in several industries.
- Next to market data we offer for the construction branch Ad-hoc studies in the field of distribution analyses, pricing, market entry strategies, customer satisfaction, image analyses etc.
- Our Consultant supports companies also when it comes to translating data into actions, i.e. the development of marketing strategies.



Our Market-Intelligence Tools

Market Analysis




- Market Volume
- Market Shares & Entry
- Competition Analysis

Distribution Analysis



- Channel Map
- Distribution Matrix
- Margins

Customer Insight




- Focus Groups
- Buying Motives
- Customer Benefits

Market Forecasts




- Indicator Models
- Life Cycle Models
- Econometric Analysis

Brand Analysis




- Brand Scorecards
- Brand - Triangle
- Brand Affinity

Customer Satisfaction




- Importance/Satisfaction Portfolios
- Customer Loyalty
- Customer Typology

Price Research



- Price-Sales-Function
- Price-Simulation-Tool
- Optimal Pricing

Web**verstärker**



- E Commerce Insights
- Search Engine Marketing
- Web Channel Analysis

„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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we show you the way

Included in the Report

- interactive PDF, Pivot Tables
- Pages (approx.) 75/ per Country
- Optional: Hard Cover

Price

- per region: 2.950 €
- All regions : 11.800 €

Detailed Information about special offers, scale of discount as well as subscription prices are presented within the order form or the interactive price calculator.



Options of ordering – Fax:+43 1 5854623 30

- Click „Buy Now“ on the website and make your order with the interactive price calculator.
- Print out your order form (at the end of the “Full Details” document and fill in your data.

Content of the Market Report

Structure of the Study

Language of the report

English, German on Request

Introduction, Market Structure & Executive Summary

Definition and demarcation of product groups, regions and methodology; summary of study results

Market Drivers

Key economic factors influencing the market: consumer behaviour, main economic indicators etc.

Import & export statistics

Total Market Analysis

Total market development and forecasts for all market segments in quantity and value by regions, product groups, driving system types and application fields and automation.

Competition Analysis

Market development by value for each region and segment. Market shares of the top manufacturers for each region and for each application for the last two years.

Market Structure

Regions:

Europe, North America, Asia-Pacific, Latin America, Middle East

Product Group

Ventilation Systems without HRV

Centrally Operated Ventilation System with HRV

Locally Operated Ventilation System with HRV

Building Type

Single-detached dwellings

Semi-detached dwellings

Multi-storey buildings

Distribution Channel

2-Step, 3-Step

Business Segment

New Construction, Renovation

Methodology

Methodology and Data Sources

The market and competitive analysis is conducted through interviewing the most important manufacturers in the respective industry. All data are cross-checked for plausibility and evaluated by means of additional sources of information.

The market models and forecasts are based on economic indicator models, which are developed individually for each market. The influencing factors are analysed by means of multivariate regression analysis and updated each year.

The economic indicators and environmental data are a result of secondary research of prestigious statistical institutes and are supplemented by internal market analyses.