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IC Market Tracking

Industrial Gases in Europe 2017

- Germany
- Netherlands
- Austria
- United Kingdom

- France
- Spain
- Italy
- Poland

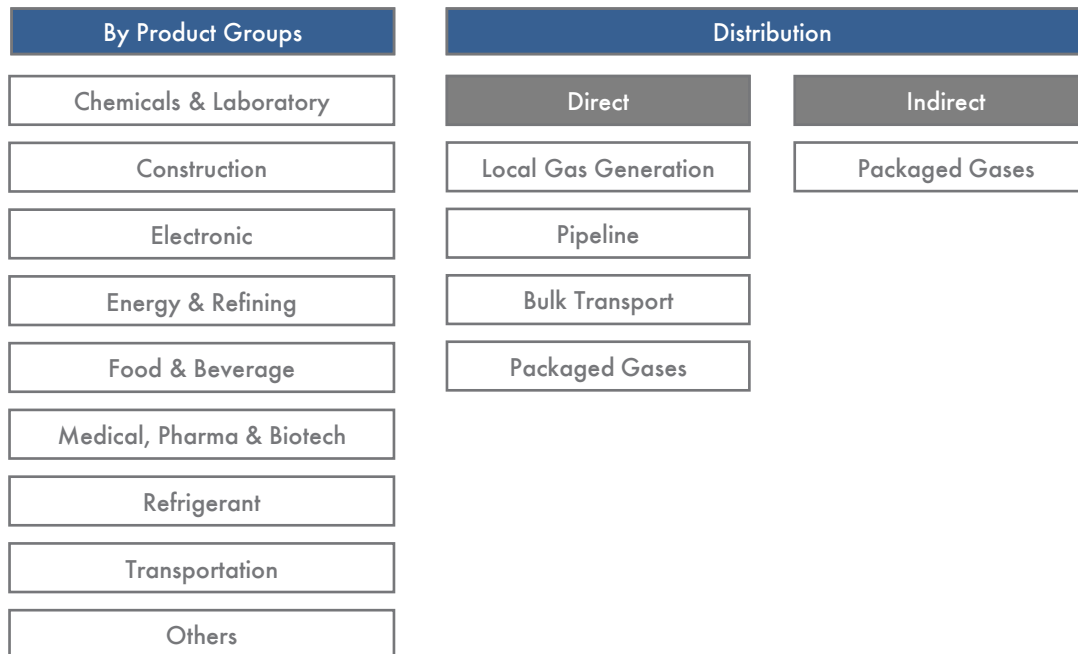# IC Market Tracking® I Profiles

Your Benefits at a Glance

✓ You will receive an overview of the **overall market** in addition to **individual market segments.**

✓ A detailed **representation of the key markets by country and forecasting until 2020** based off of our econometric forecast model.

✓ **A competition analysis** containing detailed **market shares** for selected regions in terms of:

- The total market
- Product groups
- Distribution channels

✓ Graphic representation, interactive charts and tables which allow for rapid application and utilization of the provided data.

IC Market Tracking® Industrial Gases Europe 2017

Industrial Gases 2017

Germany	Austria	Netherlands	United Kingdom
France	Italy	Spain	Poland
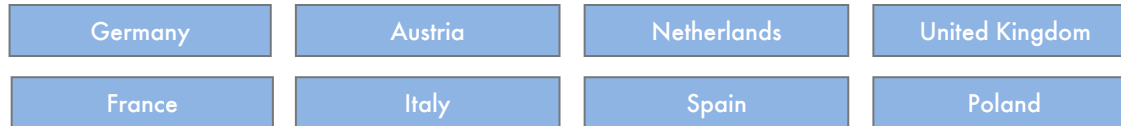
Industrial Gases Market

By Product Groups

- Chemicals & Laboratory
- Construction
- Electronic
- Energy & Refining
- Food & Beverage
- Medical, Pharma & Biotech
- Refrigerant
- Transportation
- Others

Distribution

Direct

- Local Gas Generation
- Pipeline
- Bulk Transport
- Packaged Gases

Indirect

- Packaged Gases

Definition and Demarcation

Definitions – Product group

- **Chemicals & Laboratory** — Gases used to support chemical processes such as reactions, water treatment, and paper production

- **Construction** — Gases used in welding and cutting, in the production of metals and glass, and in processes in engineering projects

- **Electronic** — Gases used in the production of electronic construction components such as special semiconductors, glass fiber

- **Energy & Refining** — Gases used in the production of energy sources

- **Food & Beverage** — Gases used in the production of food and beverages

- **Medical, Pharma. & Biotech.** — Gases used to gain or improve health

- **Refrigerant** — Gases used to take over the heating transport in cooling machines

- **Transportation** — Gases used in aerospace, automotive, railway, shipbuilding, and trucking manufacturing

- **Others** — Gases used in industrial manufacturing that do not fall under any of the categories above

Definition and Demarcation

Definitions – Distribution

- **Direct**

  The distribution channel is direct from the manufacturer to the end user

- **Indirect**

  Indirect sales through intermediaries (manufacturer through distributors to wholesalers and then to retailers)

- **Local Gas Generation**

  The situation in which gas is produced on-site near or at the location of the end user

- **Pipeline**

  The situation in which gas is distributed through a pipeline directly to the end user

- **Bulk Transport**

  The situation in which large quantities of gas are transported by truck, railway or ship directly to the end user

- **Packaged Gases**

  Packaged gas such as cylinders or other small containers that are distributed in large or small quantities either directly to the end user or indirectly through a wholesaler

Definition and Demarcation

Market Data

- All the company figures are based on primary research among the top producers in Europe. The reliability of the collected information was tested by further inquiries with the respective companies if necessary, and through interviews with industry experts and distributors

- Companies that refused to provide information have been estimated according to their own statements, information of traders, competitors, press releases and other associations. All data is cross-checked with experts
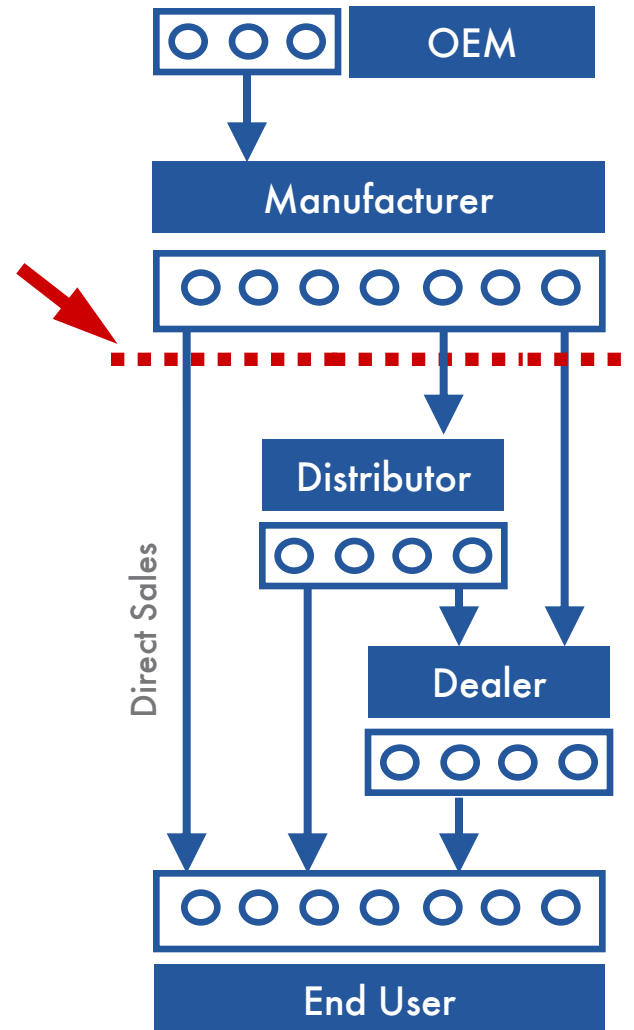
Units of Measurement:

- Turnover is stated in € 1.000

- Sales Volume is reported in Normal Cubic Meters (Nm^3)

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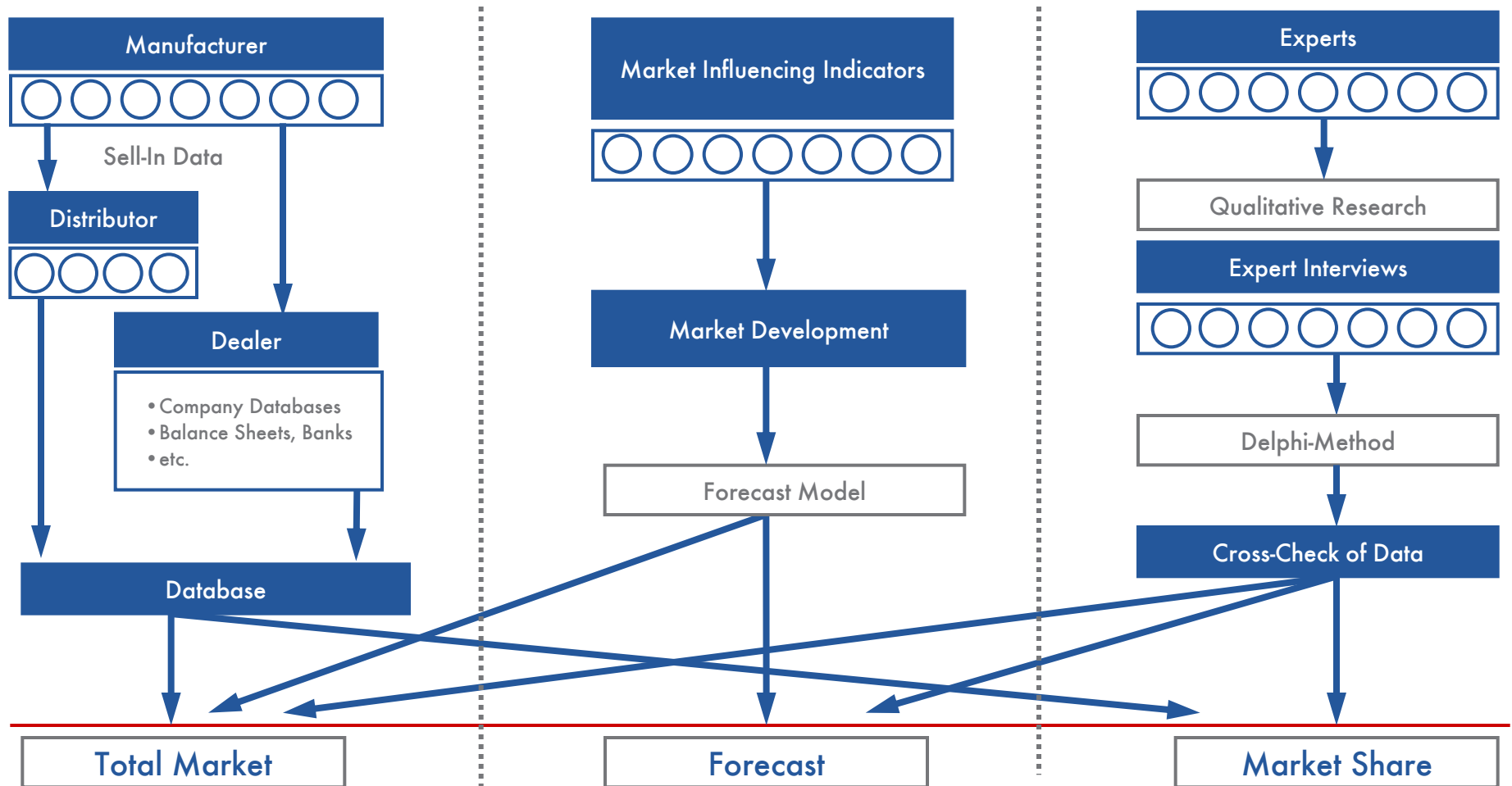
Interviews with distributors and specialised dealers act as a cross-check of the data. In addition, investigations of listings and average prices are carried out.
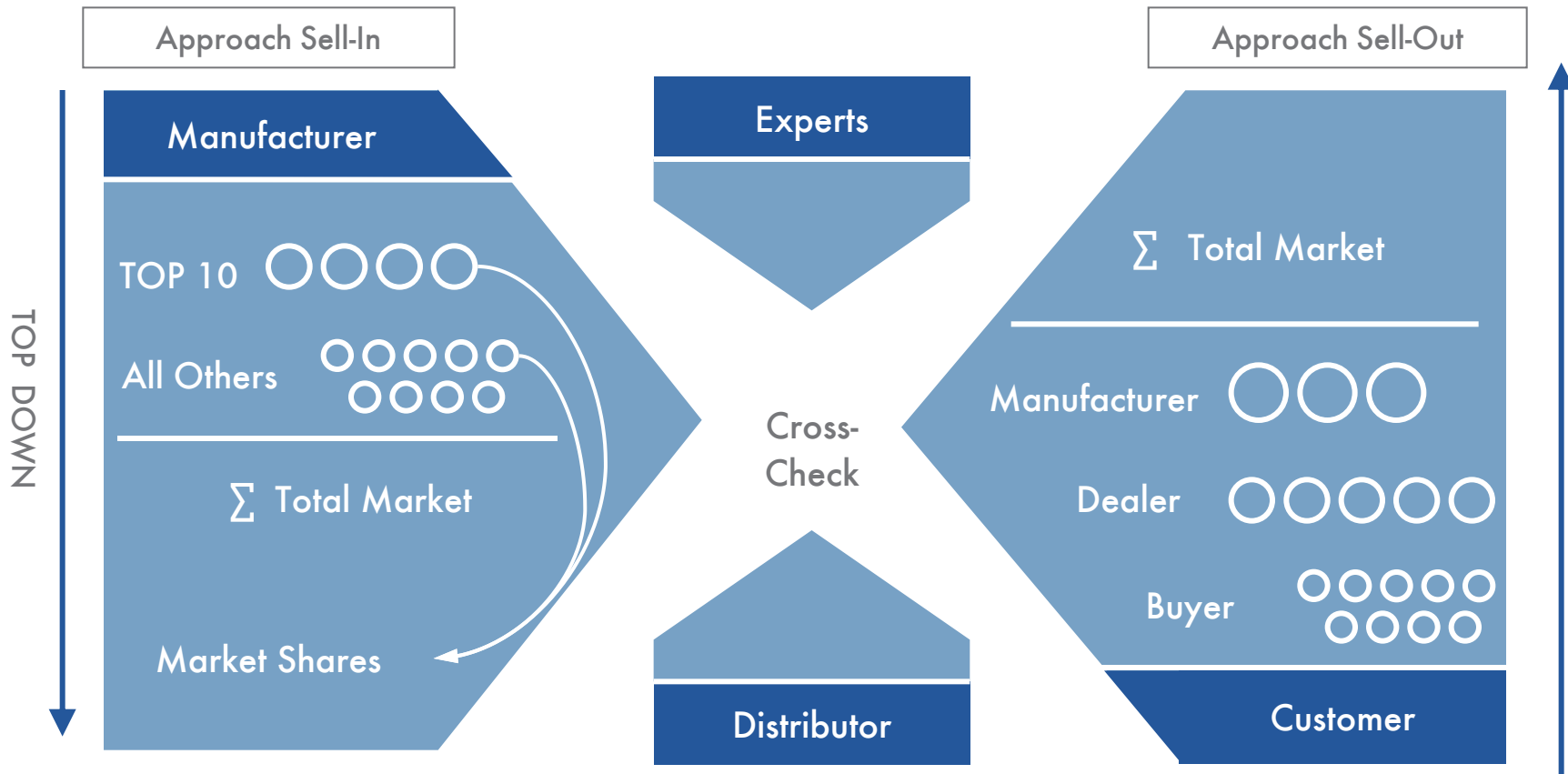
OEM

Manufacturer

Distributor

Direct Sales

Dealer

End User

How Do We Conduct Our Research?

Description Structure of Survey Methodology

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Manufacturer

Sell-In Data

Distributor

Dealer

- Company Databases
- Balance Sheets, Banks
- etc.

Database

Total Market

Market Influencing Indicators

Market Development

Forecast Model

Forecast

Experts

Qualitative Research

Expert Interviews

Delphi-Method

Cross-Check of Data

Market Share

How Do we Cross Check the Data?

Content of the Report

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 *

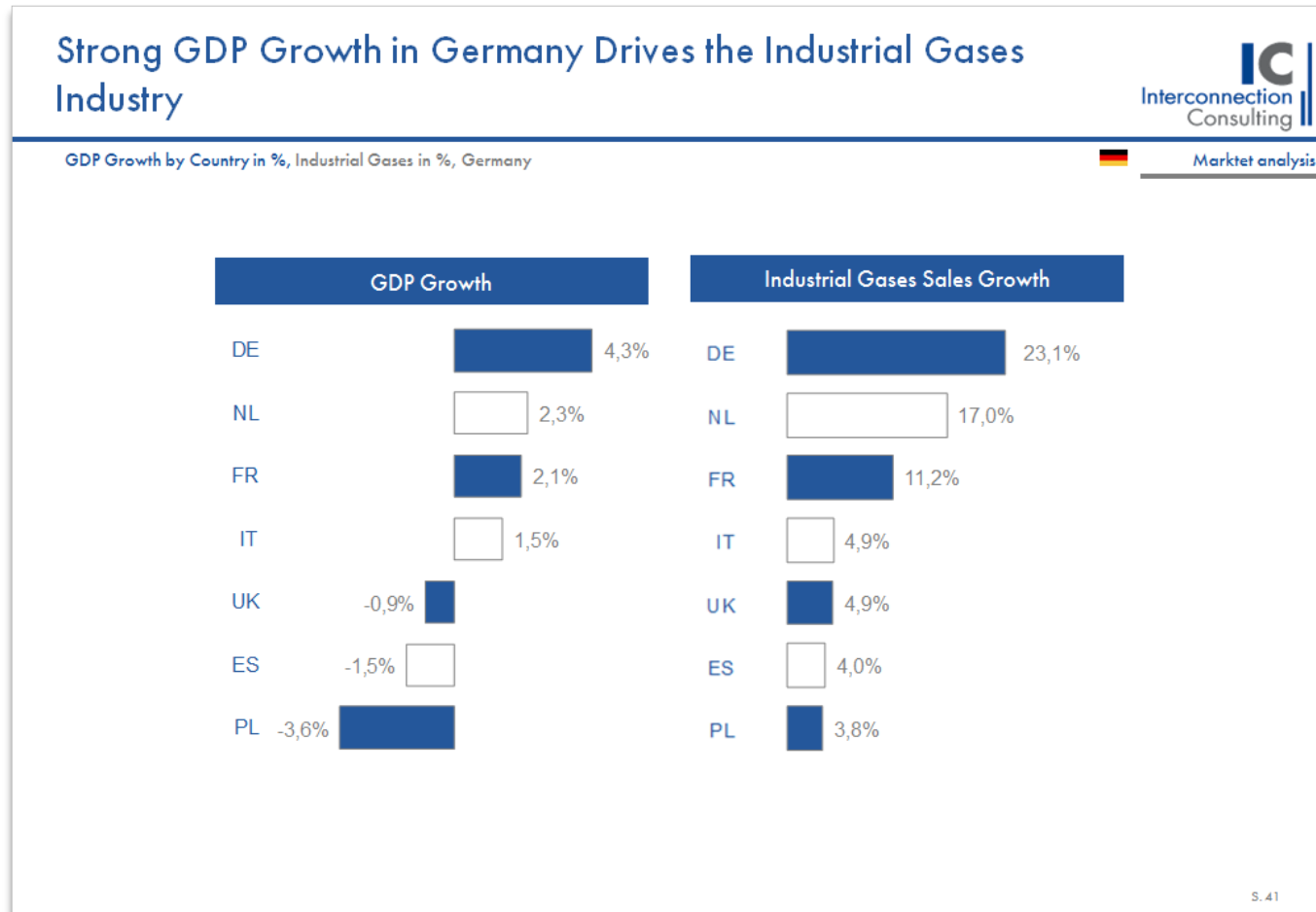|	
1. Executive Summary	(ca. 10 pages)
2. Definition and Methodology	(ca. 5 pages)
3. Market Drivers	(ca. 20 pages)
4. Regional Market Analysis and Forecast	(ca. 25 pages)
5. Competition Analysis	(ca. 25 pages)
6. Tables, Facts and Figures, Pivot Table	(ca. 5 pages)

*Pages based on single country report

Executive Summary at the Beginning of the Report

- The executive summary comprises all relevant information of the report in precise manner.

- *This chart shows dummy figures.*

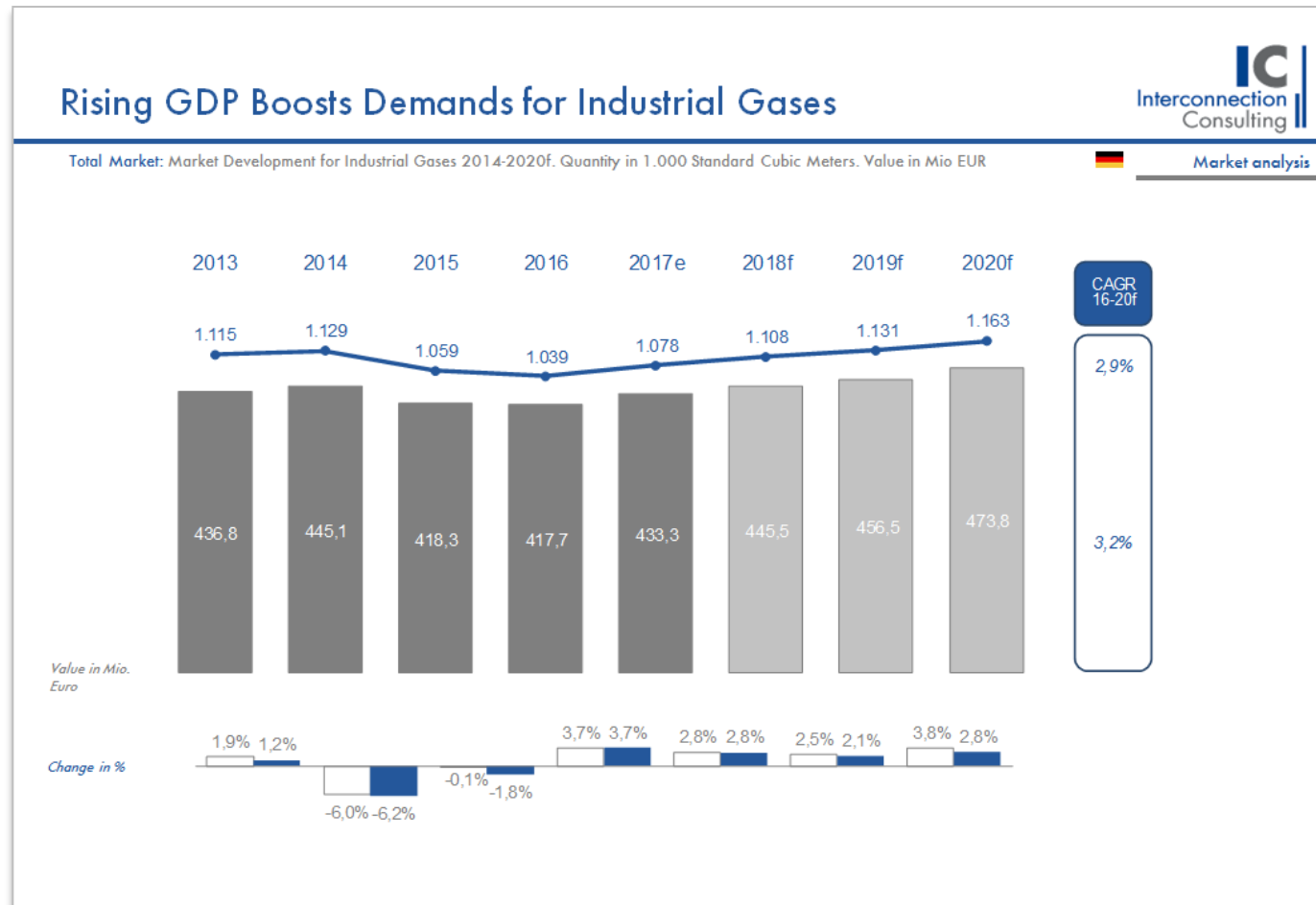# Market Environment Data of Our Forecasting Model
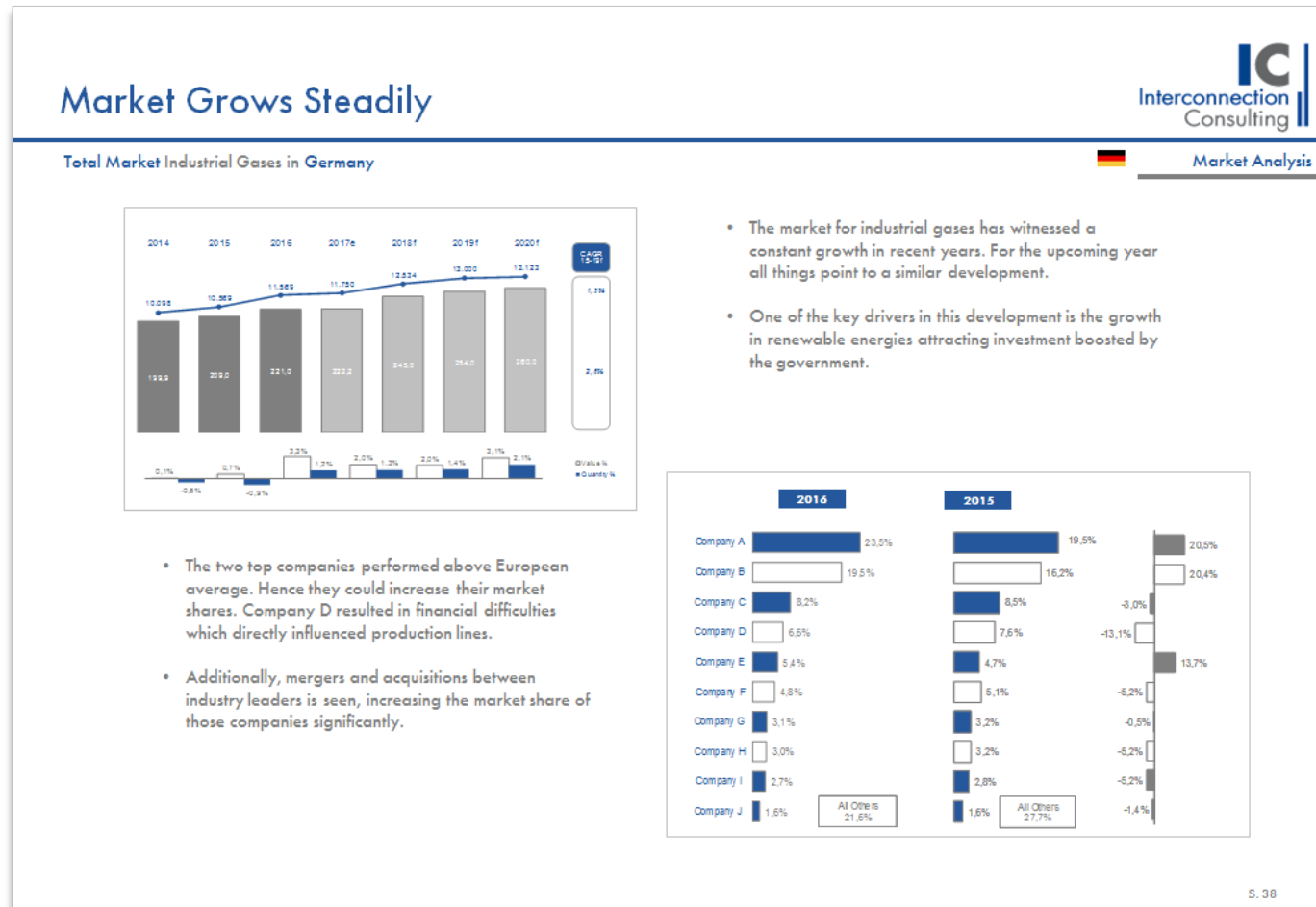
- The data for the market environment consists of main factors such as general economy data, demography, income statistics, construction environment and sentiment indicators.

- *This chart shows dummy figures.*

Strong GDP Growth in Germany Drives the Industrial Gases Industry

GDP Growth by Country in %, Industrial Gases in %, Germany

Marktet analysis

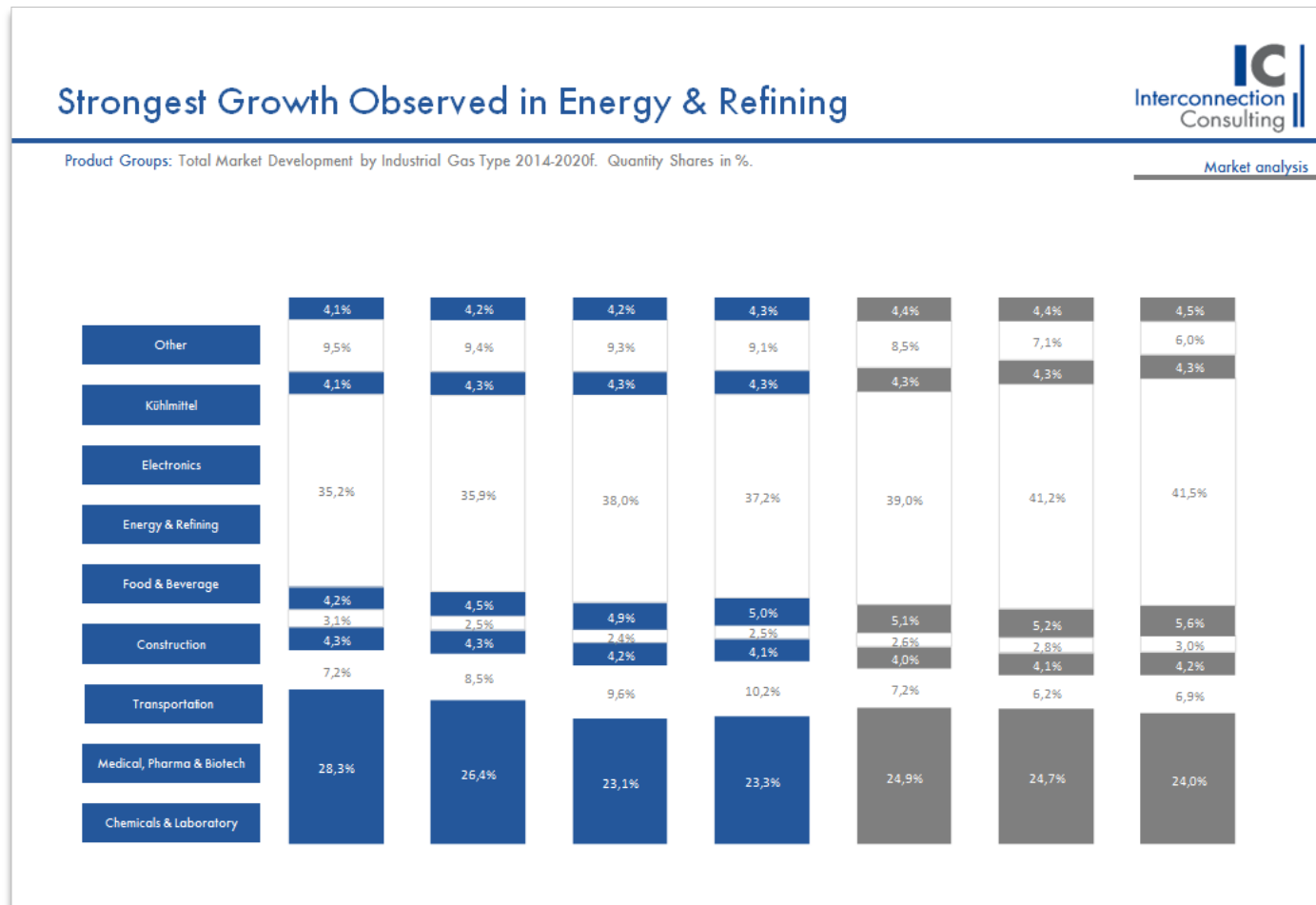|	GDP Growth		Industrial Gases Sales Growth
DE	4,3%	DE	23,1%
NL	2,3%	NL	17,0%
FR	2,1%	FR	11,2%
IT	1,5%	IT	4,9%
UK	-0,9%	UK	4,9%
ES	-1,5%	ES	4,0%
PL	-3,6%	PL	3,8%

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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.*

Rising GDP Boosts Demands for Industrial Gases

Total Market: Market Development for Industrial Gases 2014-2020f. Quantity in 1.000 Standard Cubic Meters. Value in Mio EUR

Market analysis

	2013	2014	2015	2016	2017e	2018f	2019f	2020f
Quantity	1.115	1.129	1.059	1.039	1.078	1.108	1.131	1.163
Value in Mio. Euro	436,8	445,1	418,3	417,7	433,3	445,5	456,5	473,8

CAGR 16-20f

2,9%

3,2%

Value in Mio. Euro

Change in %

1,9% 1,2% -6,0% -6,2% -0,1% -1,8% 3,7% 3,7% 2,8% 2,8% 2,5% 2,1% 3,8% 2,8%
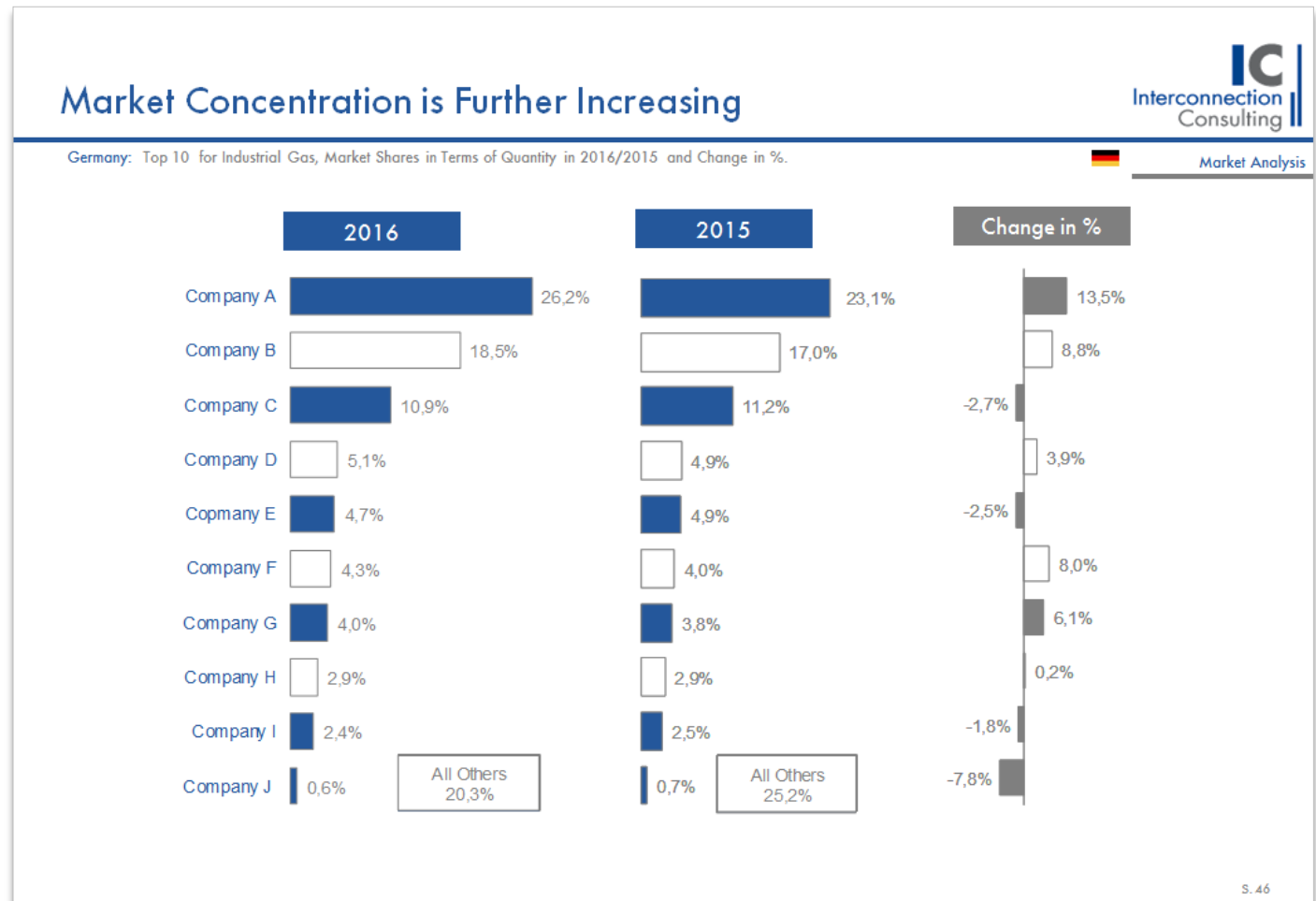
Product Group Development

- Overview of the Product Group Segmentation as well as a Forecast for the upcoming three years about their development.

- *This chart shows dummy figures.*

Strongest Growth Observed in Energy & Refining

Product Groups: Total Market Development by Industrial Gas Type 2014-2020f. Quantity Shares in %.

Market analysis

Product Group	2014	2015	2016	2017	2018	2019	2020f
Other	4,1%	4,2%	4,2%	4,3%	4,4%	4,4%	4,5%
	9,5%	9,4%	9,3%	9,1%	8,5%	7,1%	6,0%
Kühlmittel	4,1%	4,3%	4,3%	4,3%	4,3%	4,3%	4,3%
Energy & Refining	35,2%	35,9%	38,0%	37,2%	39,0%	41,2%	41,5%
Construction	4,2%	4,5%	4,9%	5,0%	5,1%	5,2%	5,6%
	3,1%	2,5%	2,4%	2,5%	2,6%	2,8%	3,0%
	4,3%	4,3%	4,2%	4,1%	4,0%	4,1%	4,2%
Transportation	7,2%	8,5%	9,6%	10,2%	7,2%	6,2%	6,9%
Chemicals & Laboratory	28,3%	26,4%	23,1%	23,3%	24,9%	24,7%	24,0%

Competition Analysis and Market Shares

- 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.*

Market Concentration is Further Increasing

Germany: Top 10 for Industrial Gas, Market Shares in Terms of Quantity in 2016/2015 and Change in %.

Market Analysis

	2016	2015	Change in %
Company A	26,2%	23,1%	13,5%
Company B	18,5%	17,0%	8,8%
Company C	10,9%	11,2%	-2,7%
Company D	5,1%	4,9%	3,9%
Copmany E	4,7%	4,9%	-2,5%
Company F	4,3%	4,0%	8,0%
Company G	4,0%	3,8%	6,1%
Company H	2,9%	2,9%	0,2%
Company I	2,4%	2,5%	-1,8%
Company J	0,6%	0,7%	-7,8%
All Others	20,3%	25,2%	

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Pivot Table

- 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)
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

Investment Plan for Your Market Research

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	Single Issue	IC Subscription*	Scale of Discounts
Single Country	€ 2.950,-		€ 5.000 -5%
All 8 Countries	€15.812,-	*IC SUBSCRIPTION 20 % PRICE ADVANTAGE*	€ 10.000 -20%
			€ 20.000 -33%

Available Countries	Poland	Germany	Austria	Netherlands
	France	Italy	Spain	United Kingdom

* **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** (scale of discounts <u>are not</u> applicable, subscription applies)
Price includes an interactive PDF Document. All prices shown exclude sales tax

Your Advantages as a Subscription Customer

Please choose between Subscription*
or Single issue

◉ Subscription* ○ **Single Issue**

As a subscription customer, you will receive the chosen report automatically at a reduced price from now on as soon as the new edition of the report is published. Additionally you have access to the following benefits:

- **Price advantage** IC Standard Subscription (annual receipt of an IC study or IC study package): **20% price advantage** compared to single issue taking into account the **scale of discount**

- **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 Delivers Data for Company Decisions

- ▪ Interconnection is one of the leading institutes for market data.

- ▪ 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

Webverstärker

E Commerce Insights

Search Engine Marketing

Web Channel Analysis

Chosen References

"IC is a permanent partner of ours and provides helpful data for decisions."

Herr Bernd Blümmers

General Manager, Saint-Gobain Solar Systems Central Europe

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

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we show you the way

Factsheet: Industrial Gas 2017

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Included in the Report

- interactive PDF, Pivot Tables
- Pages (approx.) 100/ per Country
- Optional: Hard Cover: 150 €

Price

- Per Country: 2.950€
- All 8 Countries: 15.812€

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.

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

Market Structure

Countries:
Germany, Austria, Netherlands, Spain, Italy, Poland, France, United Kingdom

Gas Industry Product Types
Chemicals & Laboratory, Construction, Electronic, Energy & Refining, Food & Beverage, Medical, Pharma. & Biotech., Refrigerant, Transportation, Other

Sales Channel
Direct – via manufacturer
Indirect – Distributor/Dealer

Distribution
Local Gas Generation – on-site
Pipeline – directly to end user by pipeline
Bulk Transport – Large quantities by truck, train, or ship directly to the end user
Packaged Gas – large or small quantities packaged in e.g. cylinders either directly or indirectly distributed

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.