

Gas strategies in the age of globalization

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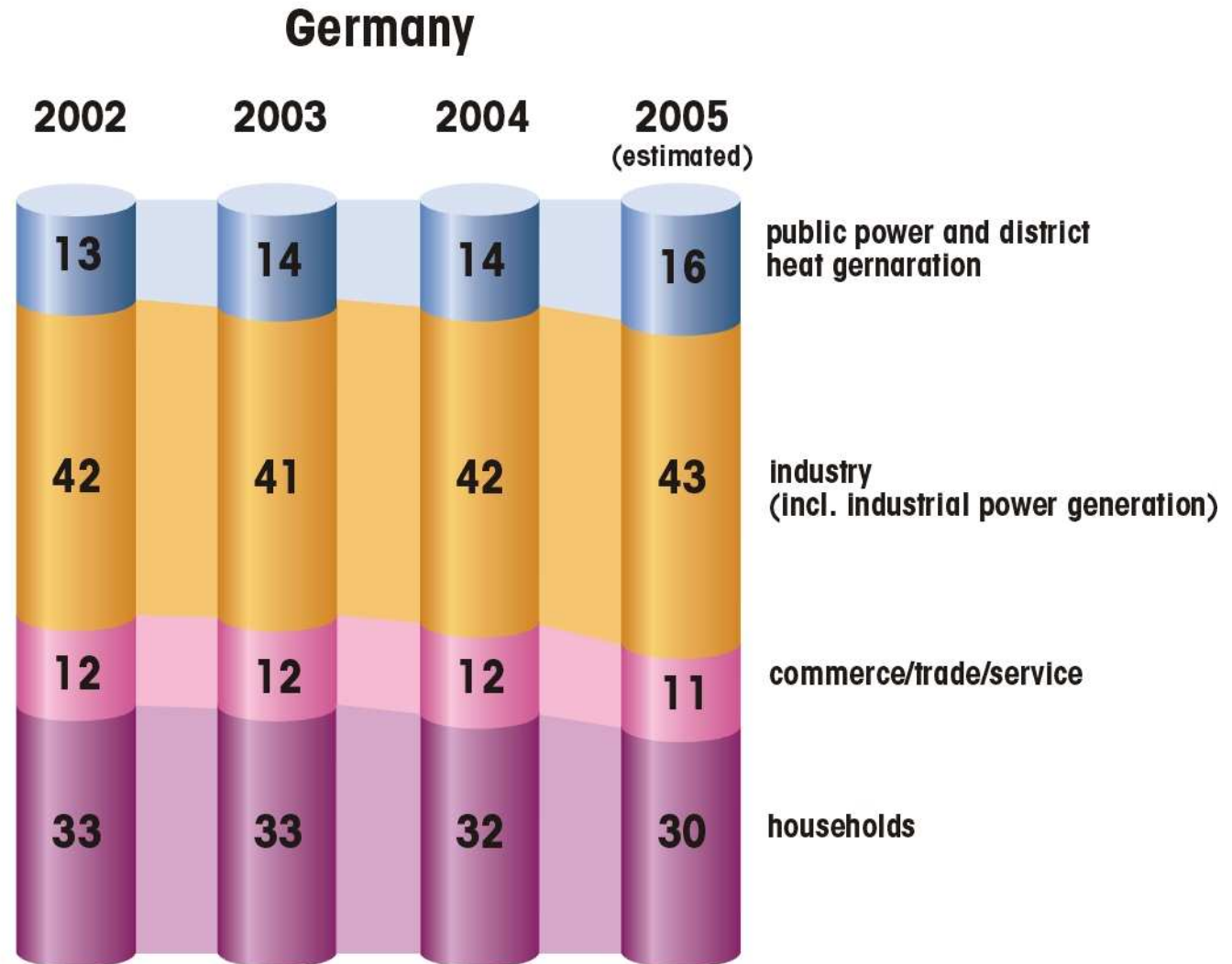


- **German Energy Industry Act in force**
- **Negotiations with Bundeskartellamt (Federal Cartel Office) on long-term contracts failed**
- **High price level on international energy markets**
- **Public debate about dependence on imports and security of supply**
- **Aggressive energy price discussion in Germany**
- **Negligible growth in German gas consumption**

- **Unclear legislative framework with innumerable paragraphs and legal orders**
- **Introduction of an untested network access model with extensive cooperation requirements**
- **Extra costs for restructuring, particularly as a result of unbundling and increased information and reporting requirements**
- **Entrepreneurial uncertainty; ex-ante control at least six months prior to price adjustments**

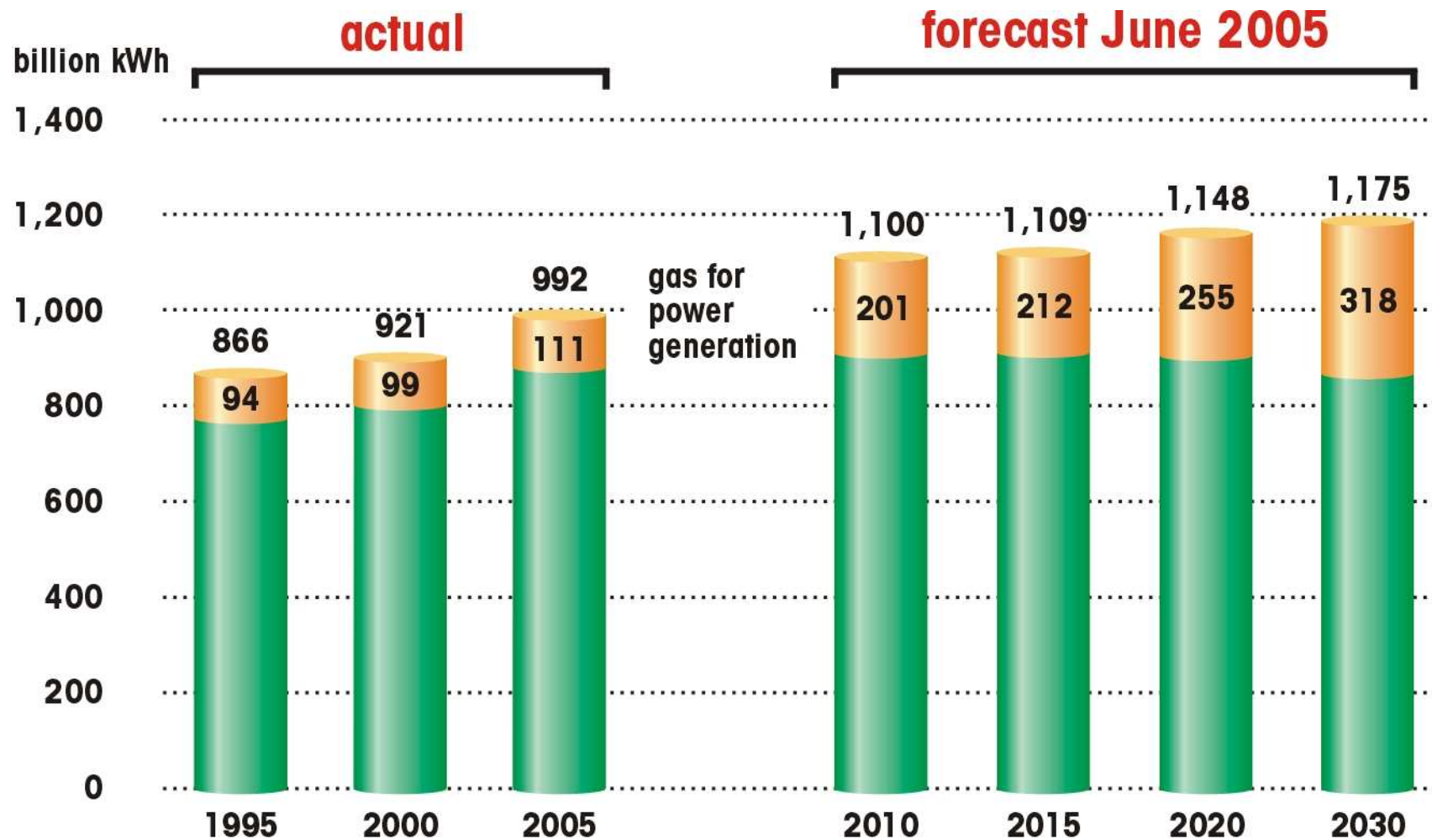
Structure of natural gas consumption in Germany

%



Source: Federal Statistical office

Forecast German natural gas consumption



Source: EWI/Prognos, June 2005

Current developments:

- Saturated demand for heat generation
- Tangible impact of price developments on consumer behaviour (individual saving measures)
- Noticeable decline in specific consumption
- Competitiveness of alternative energies (heat pumps; wood pellets)
- Uncertain developments in power generation sector (exiting nuclear power; alternative energies)

Changing gas market in Germany

Strategies for keeping customers:

- **Leap in quality of activities to retain existing customers**
- **Significant improvement in communications (e.g. transparency with regard to changes in prices)**
- **Uncomplicated switch to different supplier possible**
- **New products coupled with alternative energies (e.g. gas space heating plus solar system; participation in biogas production projects)**

The natural gas market has become a seller's market.

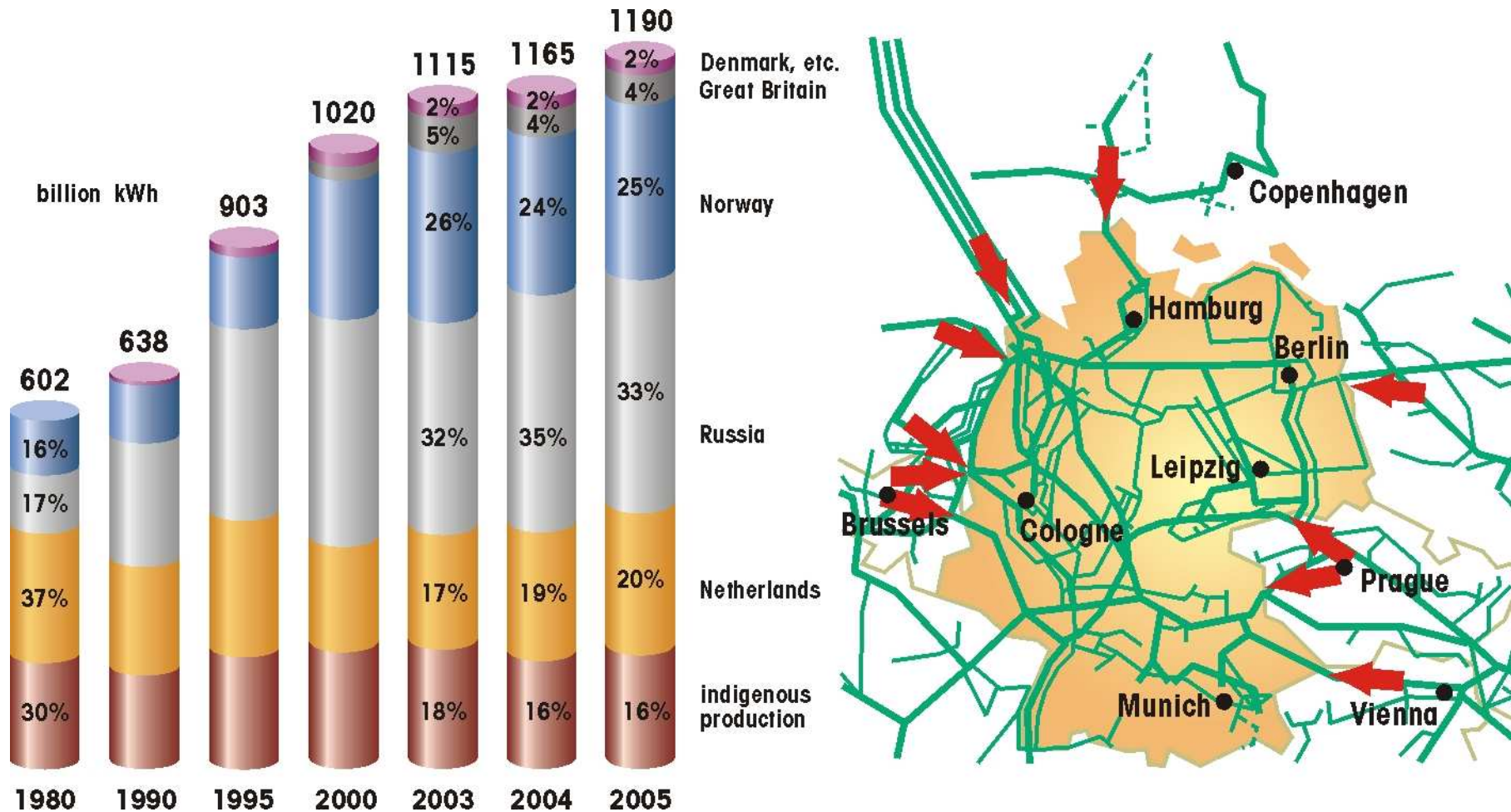
One-side dependence can entail supply bottlenecks or interruptions (e.g. Russia - Ukraine dispute)

Possible solutions for countries lacking in raw materials:

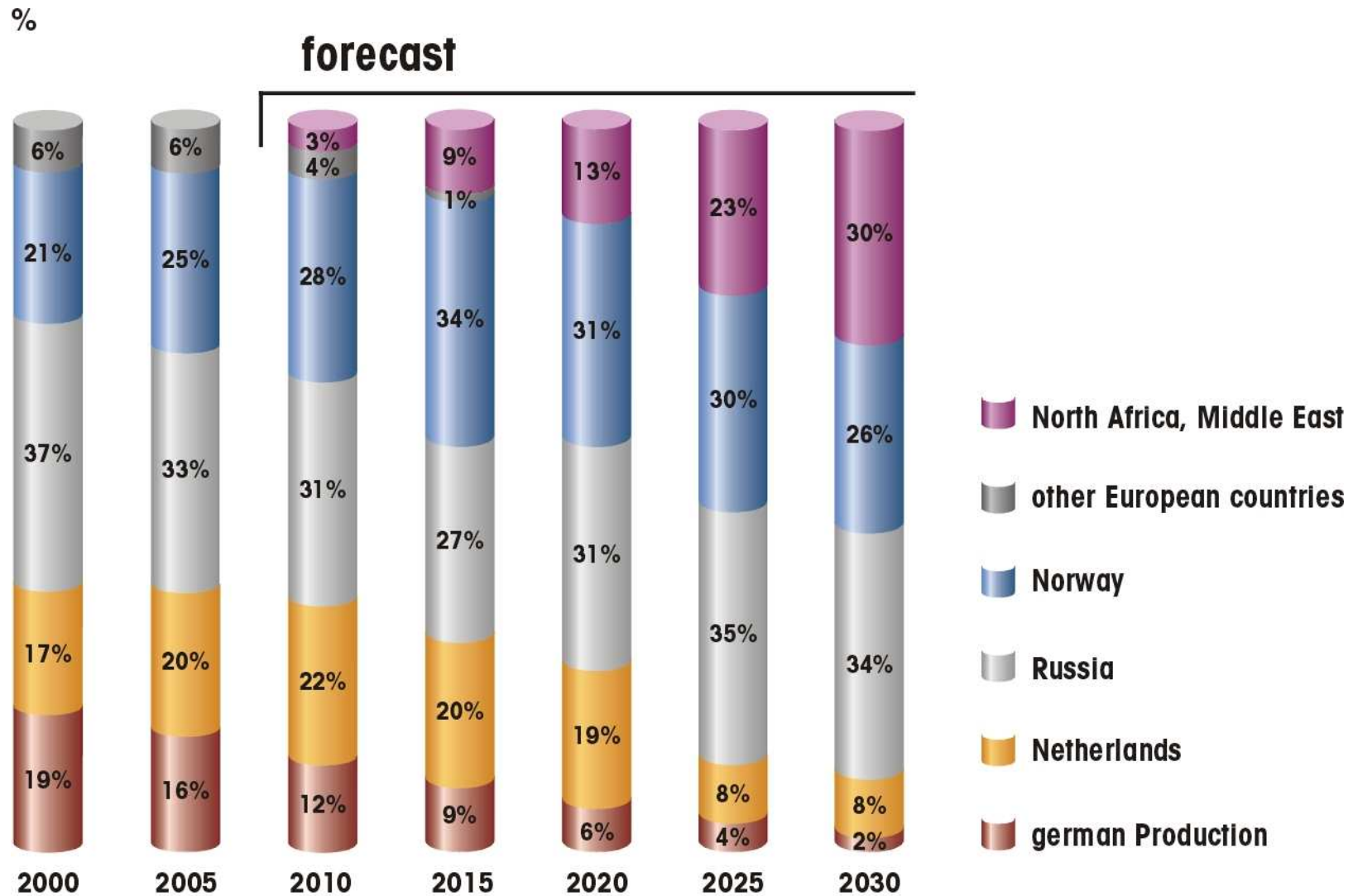
- **Diversification of energy imports (sources and routes)**
- **Long-term supply agreements**
- **Cooperation based on partnerships**

German gas supplies

High dependence on imports



Sources of gas supply for Germany



Source: Global Insight 2005

Main challenge: Securing the supply base

- **Expansion of supply base**
 - new supply agreements with producers
 - participations in natural gas production
 - LNG
- **Long-term contracts are prerequisite for:**
 - Securing volumes required
 - Securing competitive prices as contribution to competitive economy
- **Manage risks** generated by regulation of contract duration