



BILFINGER

**POWER
SYSTEMS**

Bilfinger Power Systems GmbH

WE MAKE PIPING SYSTEMS WORK

Klaus J. Schmitz | CMD 2013 – Capital Market Days

November 29, 2013

Agenda

1. Portfolio and strategy
2. Development of output volume
3. End markets and customer structures
4. Current challenges / Key success factors
5. Cooperation within Bilfinger
6. Special topic:
Current status and perspective of international nuclear energy markets



Piping Systems

1.1 Portfolio

Bilfinger SE Piping Systems



DACH

Middle East / Asia

Piping Systems

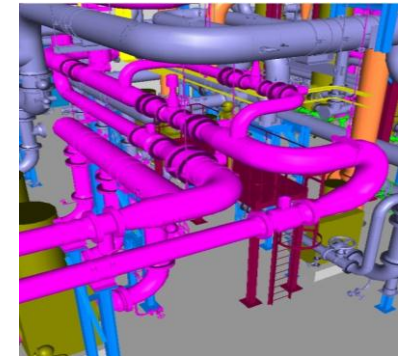
1.2 Product range

Key Industries

	Power	Oil & Gas	Chem.	Others
Piping Technologies (D)	X			Nuclear Power, Paper Industry
Rohrleitungsbau (D)	X		X	Pulp, Paper & Sugar Industry
VAM Anlagen-technik (A)	X	X	X	District Heating, Heat & Gas Storage, Hydro, Geothermals
Bohr und Rohrtechnik (A)	X	X	X	District Heating, Pipelines, Sugar Industry
Neo Structo (IND)	X	X		
DBME (UAE)	X	X	X	Desalinations

Key Services and Supplies

- Engineering
- Manufacturing
 - Piping systems
 - Tanks & vessels
 - Heat exchangers
 - Hydro components
- Installation and maintenance
- Turnarounds and short-stop activities
- Rehabilitation and life-time extension
- Local support and stepping stone for other Group companies into the Middle East and Indian markets



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1.3 Strategy

Vision

*Create a coherent product portfolio for distinct industries and selected target regions by combining the Division's piping and process know-how with supplies and services of other Bilfinger Group companies and selected partners.**

Strategic cornerstones

- ⇒ *Align activities based on clearly defined short- and medium-term strategies for industries and target regions*
- ⇒ *Focused expansion in selected number of growth regions (India / Middle East) and neighboring European countries*

Key figures

**Output
volume**

(Unconsolidated)
~ €800 M

Employees

~ 5,000 FTEs

EBITA in %

(Unconsolidated)

~ 9 %

Management

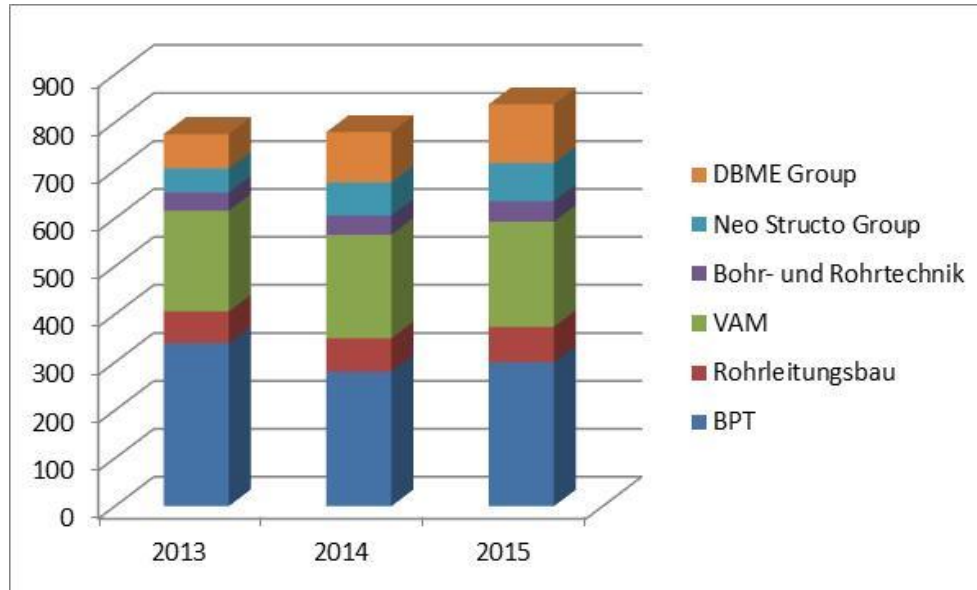
- **J. Enenkel**
(Responsible SE Executive Board Member)
- **K.J. Schmitz**
(Division Executive President)
- **A. Neubauer**
(Division Finance Director)

* e.g. waste-to-energy plants, district heating and storage plants.

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2. Development of output volume

Expected output volume in € million



Key statements

- Construction boom of conventional power plants coming to an end in Western Europe.
- Only partial compensation by markets like Poland and Romania.
- Stronger focus on hydro power, oil, gas and other selected industries.
- Entering into new market segments, e.g. gas and heat storage, waste-to-energy.
- Local content for GT conversion projects in Middle East and boiler rehabilitation projects in India.



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3. End markets and customer structures

Focus customers / industries

- ⇒ Utility companies, municipal and independent power suppliers

- ⇒ Selected industries, depending on the regional strategy*

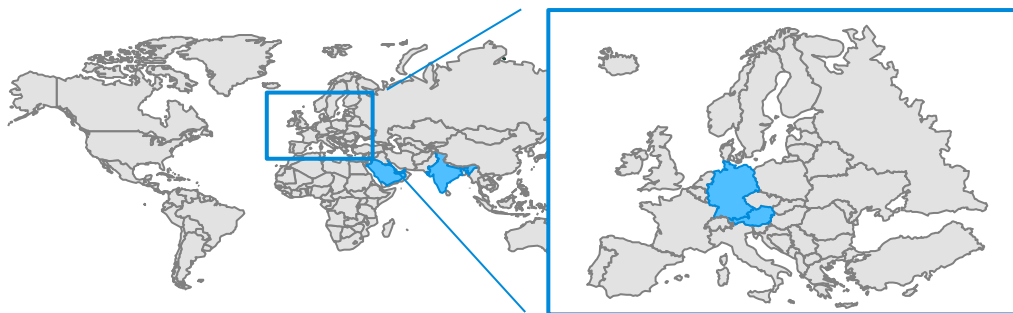
Key products / services

- ⇒ Comprehensive combination of engineering, manufacturing and assembly of piping-related systems and plant components**

- ⇒ Complex products tailored for target regions and industries in cooperation with other Bilfinger companies and selected partners

- ⇒ Maintenance services, lifetime extension, repairs and upgrades

Core geographies



- ⇒ Strong focus on Germany & Austria to be shifted to neighboring countries (e.g. Eastern Europe, Turkey)

- ⇒ Leverage Neo Structo / Spetech and DBME as nucleus for organic expansion in India, Middle East and neighboring growth regions

- ⇒ Operations in India and Middle East to establish themselves as local partners for other Bilfinger companies

* utilising Bilfinger's global presence

 Divisional footprint

** for brownfield and greenfield power plants (thermal, hydro and nuclear) and industrial plants, also via long-term service agreements

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3. End markets and customer structures

Chemical / Petrochemical



voestalpine
EINEN SCHRITT VORWAUS.

Q8 KPE
RAFFINADERI EUROPOORT ROTTERDAM

EVONIK

BASF
The Chemical Company

DSM

LANXESS
Energy Chemistry

URSA
Grupa Uselle

WACKER

PCK
Raffinerie GmbH

dyneon

bp

Linde

klöckner pentaplast

envia
MIRA

AkzoNobel

Dow

Technip

TEBODIN
Catalysts & Engines

JACOBS

C.A.C.

EDL

TOTAL

Nuclear



EnBW

AREVA

EDF
ENERGY

VATTENFALL

SIEMENS

MITSUBISHI
HEAVY INDUSTRIES AMERICA, INC.

TOSHIBA

Westinghouse

TVO

HITACHI
Inspire the Next

Energy



SIEMENS

ALSTOM

STADTWERKE
CHEMNITZ AG

e-on
Bayern

VATTENFALL

ZAS

STAHLWERK THÜRINGEN
Grupa Allianz Gallarda

FISIA BABCOCK
ENVIRONMENT GmbH

MVV Energie

SW/M
Stadtwerke München

ZMS
Zweckverband
Müllverwertung
Schwandorf

FICHTNER

Eskom

VORWEG GEHEN

EnBW

Industry



voestalpine
EINEN SCHRITT VORWAUS.

AMMAG
Your partner for particle systems

APL

Amberger Kaolinwerke
BY VATTENFALL 100% GELIERT

SIEMENS
Görlitz

WUPPERVERBAND
für Wasser, Mensch und Umwelt

SIEMENS
Siemens Wind Power

Nordzucker

verbio
Biofeed and Technology

InfraServ
KNAPSACK

AIR LIQUIDE

Current challenges

- Decrease of project volume with traditional scope in home markets like Germany and Austria as well as in the nuclear sector in general.
- Streamline tools and procedures among Division companies based on best practice to enable cooperation and management of key resources and information across company, cultural and geographical borders.

Key success factors

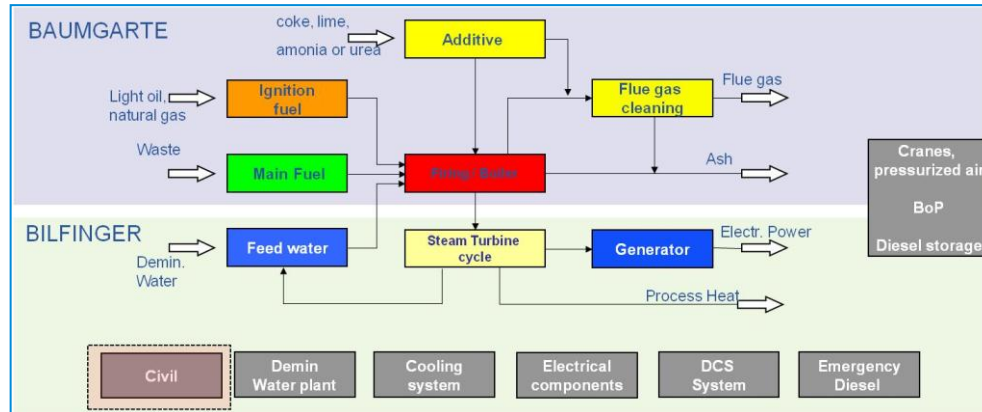
- Specialised know-how and European market leadership for HP piping systems.
- Development of strategies tailored to selected industries in geographical regions.
- Development of new products in close cooperation with other Group companies and selected external partners. Example:
Exclusive long-term cooperation with Baumgarte and Envi Con for complete medium-sized waste-to-energy plants in defined target markets.
- Turning the local expertise and capabilities of Bilfinger DBME (Gulf Region) and Bilfinger Neo Structo (India) into stepping stones for other Group companies and selected external partners.
- Focus on regional and product-related key accounts.

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5. Cooperation within Bilfinger

Example:

Complete medium-sized waste-to-energy plants



- Markets: UK, Poland, Russia, Turkey and Middle East
- Bilfinger scope value: €30 - €120 million per project
- Initial cooperation with Baumgarte: end of 2016

- First contract: expected for second half of 2014
- Contract structure: Baumgarte/BPT open consortium
- Group companies on board: BPT and Envi Con (for overall planning)
- Cooperation opportunities:
 - Civil works
 - DCS system
 - Insulation
 - Scaffolding
 - Boiler and equipment erection
 - Other local content
- Benchmark opportunity for BNG's flue gas cleaning technology

Market Situation

- The World's Nuclear Power Plant (NPP) fleet of 435 reactors with 370 GW installed capacity has an average age of 27 years.
- Based on a production life of 40 years there are massive medium-term investment needs in traditional NPP markets like USA, France, Japan and Russia.
- Shift of key customers from European companies like Areva, EDF and Westinghouse to Asian and Russian players like Toshiba, MHI, GE/Hitachi, Rosatom and Atomenergomash.

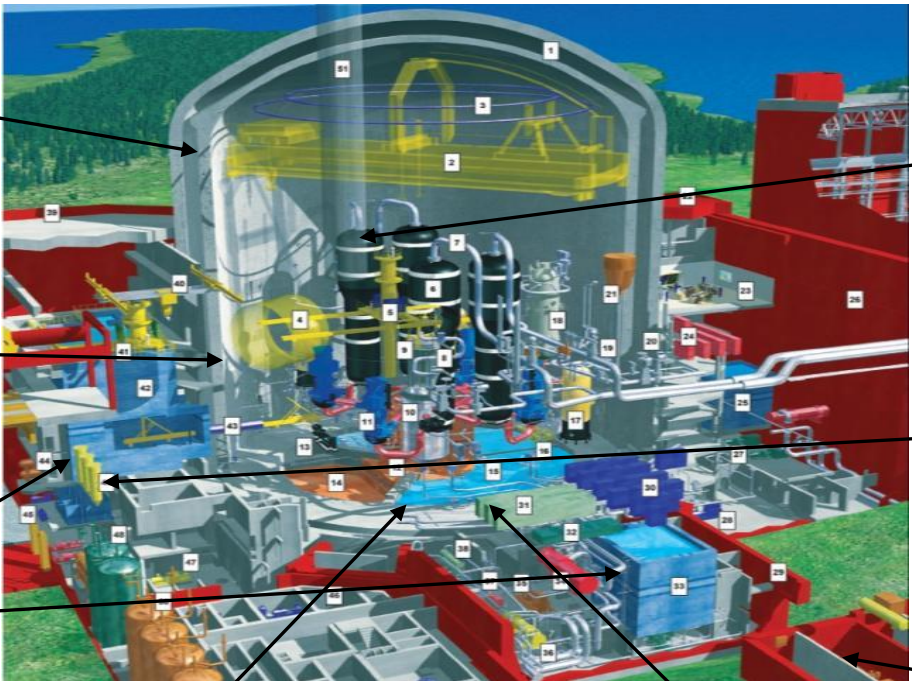
Bilfinger's view

- Domestic focus clearly on decommissioning of NPPs
 - Planning and dismantling of own traditional scope
 - Babcock Noell GmbH (BNG)
 - Bilfinger Piping Technologies GmbH (BPT)
 - Additional product development in close cooperation with other Bilfinger companies.
- Substantial project volume for new built NPPs in a number of European countries like UK and Finland as well as in regions like Middle East and India.
- Potential entry barriers into new regions to be overcome by making use of Bilfinger's local footprints and in close cooperation with long-standing clients and partners.

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6. Current status and perspective of international nuclear energy markets

Examples of BNG's NPP scope (part of Bilfinger's Power Systems Division)



Containment Liner

Airlocks

Pools & Tanks

Core Melt Stabilisation System

RPV Closure Head Equipment

Filter Exchange Machine

Waste Handling Systems

IRWST

The central 3D cutaway diagram shows a detailed view of a nuclear reactor vessel with various internal components numbered 1 through 40. Arrows from this diagram point to several photographs of specific equipment: a large containment liner being lifted by a crane, an airlock interior, a core melt stabilization system with a yellow crane, a reactor pressure vessel closure head, a filter exchange machine, waste handling systems, and an IRWST (In-Containment Refueling Water Storage Tank) structure.

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6. Current status and perspective of international nuclear energy markets

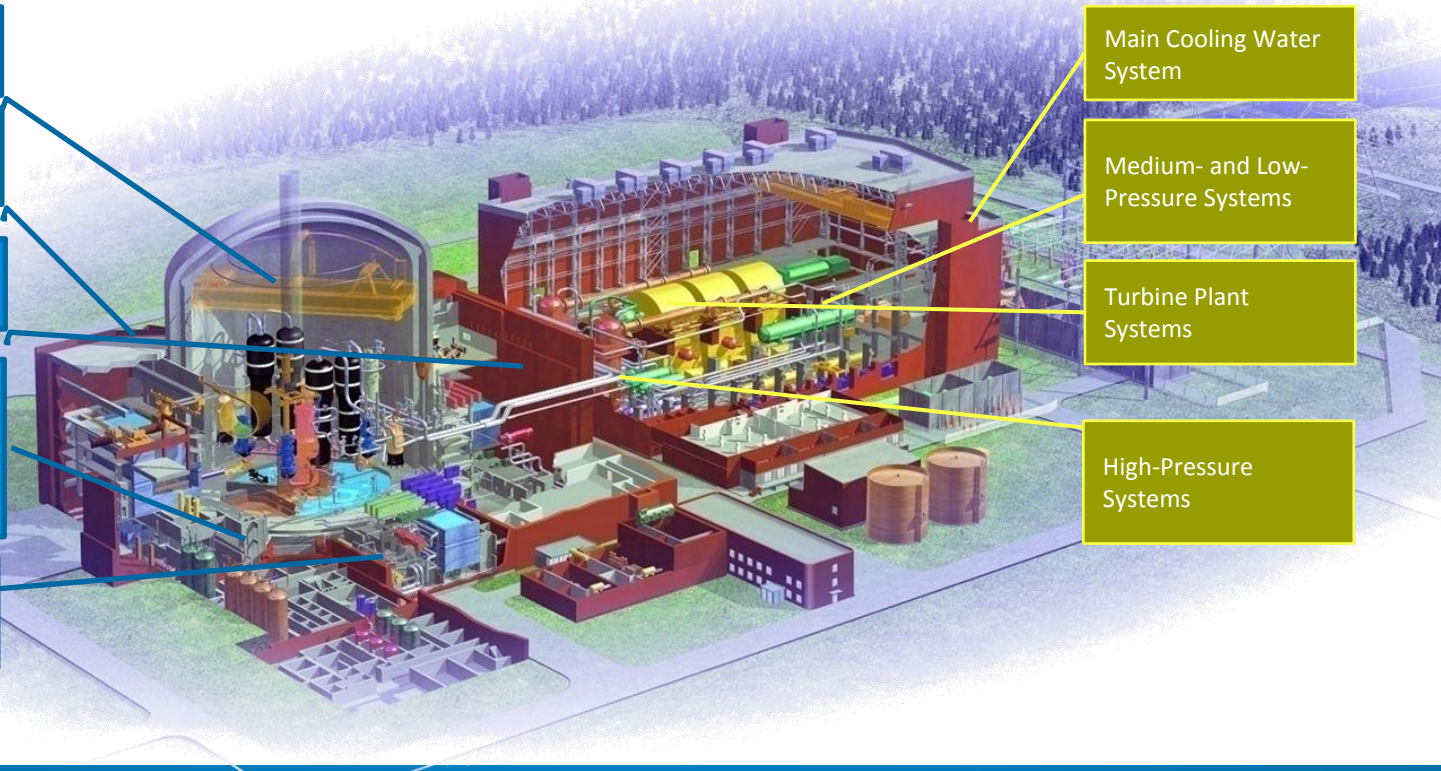
Examples of BPT's NPP scope (part of Bilfinger's Piping Systems Division)

Reactor Piping Systems

- Reactor Building
- Fuel Elements Storage
- Security Building Redundance 1- 4
- Building for Auxiliary, Waste Treatment, Emergency Power and Access Systems
- Ductwork Pumping Building

Turbine House Piping Systems

- Main Cooling Water System
- Medium- and Low-Pressure Systems
- Turbine Plant Systems
- High-Pressure Systems



European target markets

- Finland
 - Existing positive track record in Olkiluoto 3 (OL3), i.e. mechanical completion scheduled in 2016 and commercial operation expected in 2019.
 - Client expected to decide on OL4 in Q1/2014, 1,600 MW European Pressurized Water Reactor (EPWR).
 - Further 1,200 MW (type AES 2006) planned by Fennovoima and Rosatom, authority approval by STUK expected in Q2/2014.
- UK
 - Government approved 3 new NPPs in October 2013
 - Hinkley Point C, 2 x 1,600 MW EPWR
EDF Energy as investor, AREVA as EPC contractor.
 - Wylfa 2 x 1,300 MW & Oldbury 2 x 1,300 MW with Advanced Boiler Water Reactor (ABWR) technology, Horizon Nuclear Power as investor, Hitachi as EPC contractor.
 - Further locations for future NPPs approved in England and Wales.

Non-European target markets

- Middle East
 - Strong local footprint with Bilfinger DBME.
 - Saudi Arabia recently confirmed its long-term plan to build 16 nuclear reactors (approx. 17 GW) until 2032 and signed initial agreements with
 - GE/Hitachi
 - Exelon/Toshiba/Westinghouseboth groups offering ABWR technology.
- South Africa
 - Strong Bilfinger presence in the country for conventional new-built power plants, service, life-time extension and HP piping.
 - Existing NPPs produce approximately 5,300 MW.
 - Additional NPP capacity of 9,600 MW to be built by state-owned ESKOM until 2025.
- India
 - Existing footprint with Bilfinger Neo Structo Group.
 - Ambitious plans to extend the production of conventional and nuclear power.
 - Upcoming general election in Q2/2014 may release the current hesitation to make long-term decisions.

Summary

- Supplies and services for new-built and operating NPPs will remain a vital part of the Division's mid- and long-term strategy and portfolio outside Germany.
- Development of new products, in cooperation with other Bilfinger companies, to benefit from German decommissioning potential.
- Strengthening of service focus for existing NPPs via long-term service agreements, e.g. rehabilitation of piping systems in 58 French reactors for EDF until 2019.
- Entry into new markets with known clients and by offering Bilfinger's local expertise and footprint.





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PIPING SYSTEMS ... - MORE THAN JUST PIPES!

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