



Bharat Forge Corporate Overview Presentation

“Make in India “ Roadshow

Karl Bishop, Director, Specialty Products, Intl. Sales

BHARAT FORGE



Kalyani Group has been at the fore front of Technology...



- ✓ **Largest Forging Capacity in the world**



- ✓ **No.1 in Axle Aggregates in India**



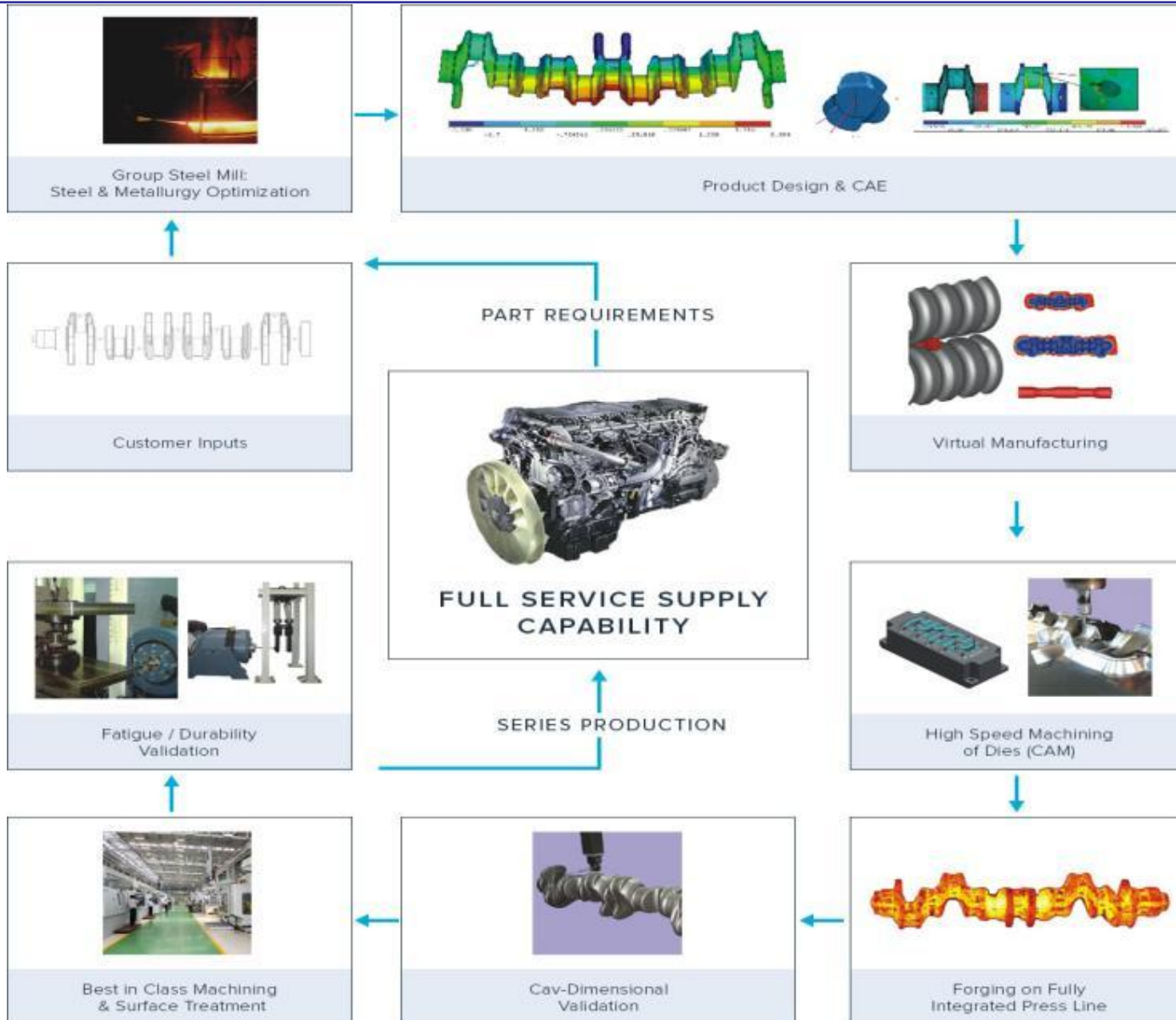
- ✓ **No.1 in Engineering Steel in India**



- ✓ **No.1 Exporter of Wheels from India**

Kalyani Group has always been at the forefront of Technology and is committed to the goal of being recognized globally as leaders through engineering excellence.

Full Service Supplier Capability



We supply performance and safety critical components to some of the marquee names from global automotive and industrial sectors.

...with presence in six key sectors and manufacturing footprint spread across India and Europe



INDIA

EUROPE

Engineering Steel

- Kalyani Steels
- Kalyani Carpenter Special Steels

Forgings

- Bharat Forge Ltd
- Kalyani Technoforge

- CDP Bharat Forge GmbH
- Bharat Forge Daun GmbH
- BF Aluminiumtechnik GmbH
- Bharat Forge Kilsta AB
- MGL, France

Defence Systems

- Kalyani Strategic Systems Ltd
- BF Elbit
- Analogic
- BF PEL
- BF Rafael

Auto Components

- Automotive Axles
- Kalyani Maxion Wheels India Ltd.

Energy & Infrastructure

- Alstom Bharat Forge Ltd
- BF Utilities
- Kenersys India
- Khed City (SEZ)

- Kenersys GmbH

Specialty Chemicals

- Hikal Chemicals

Strategically aligned Joint Ventures

AUTOMOTIVE AXLE



1980

KALYANI MAXION
WHEELS LTD.



1995

KALYANI CARPENTER



1995

ALSTOM BHARAT FORGE



2009



2013



2014



2015

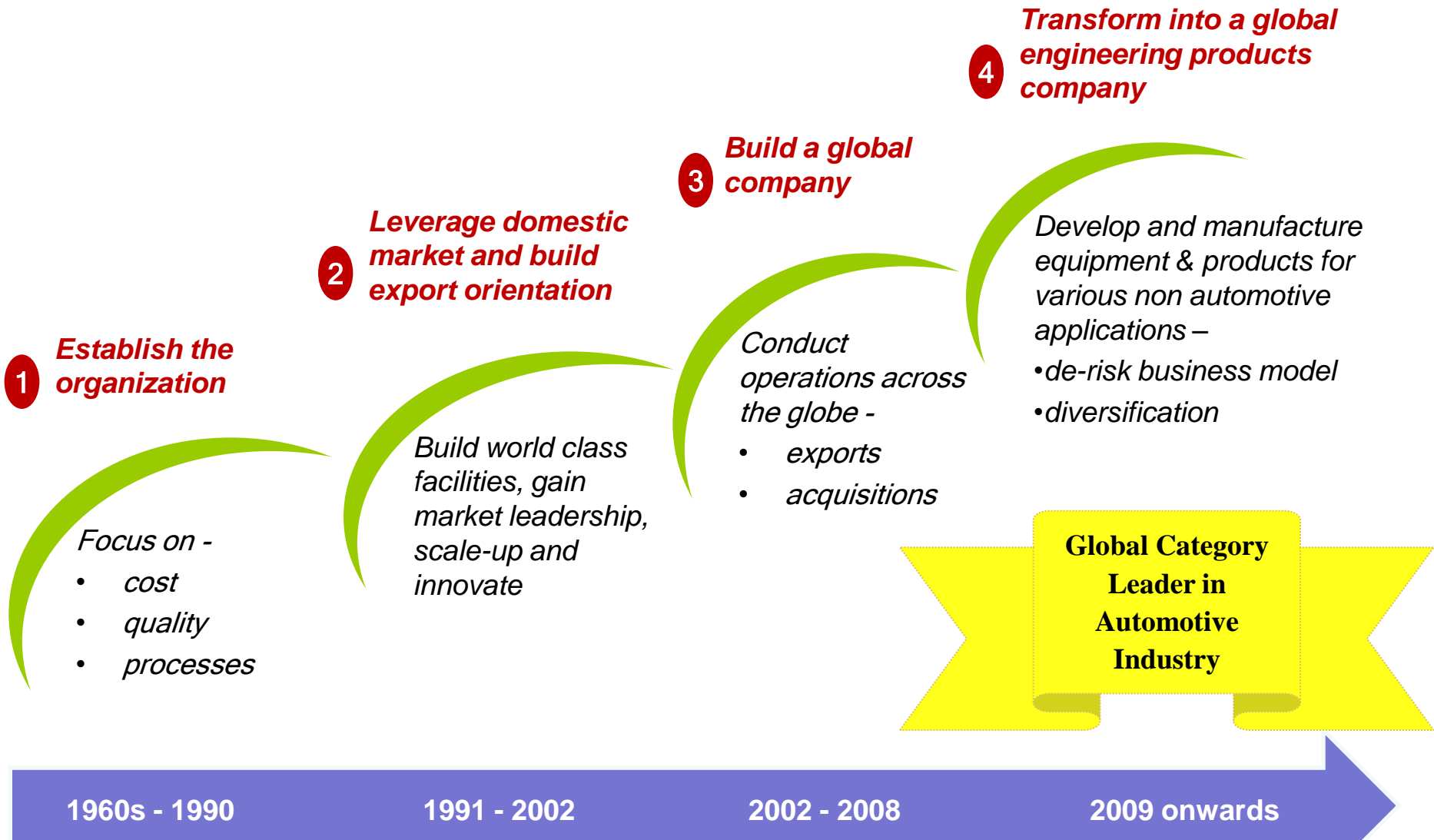
Over the years, Kalyani Group has strengthened its joint ventures and forged profitable relationships with its partners.

Some of the top global OEMs have chosen us as their development partner.

Bharat Forge Limited

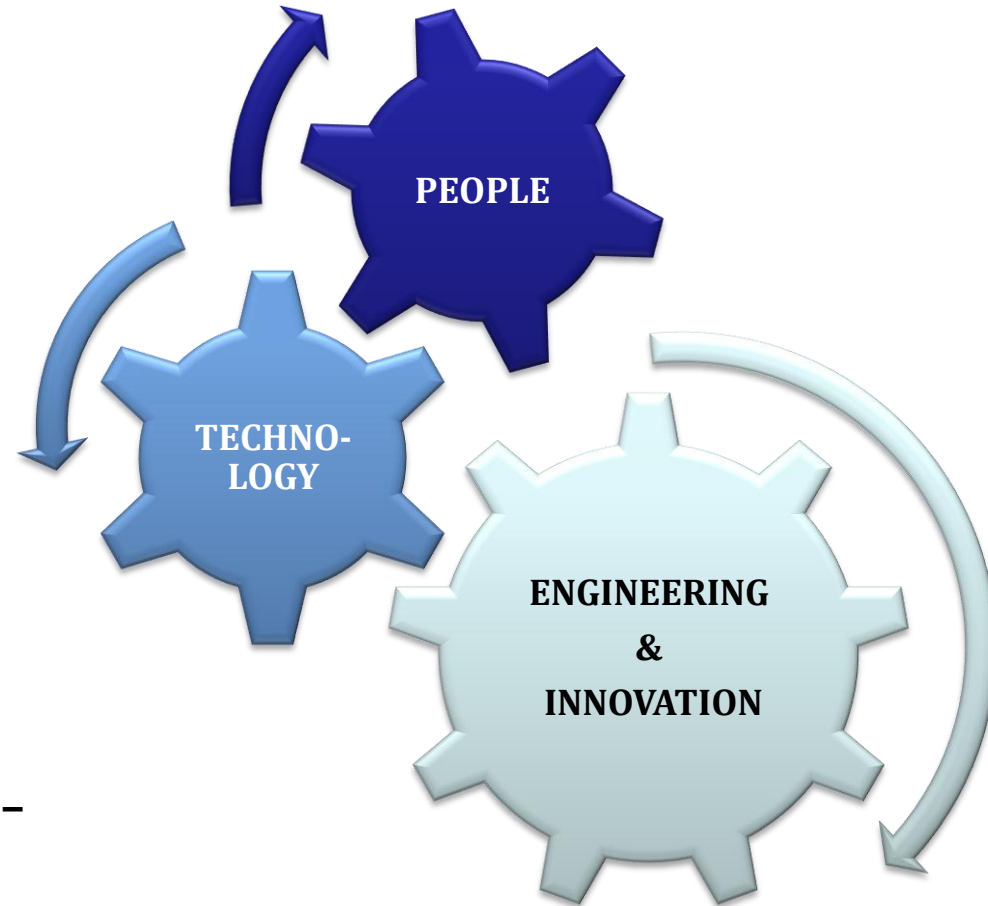
Our Story!

We followed a step-by-step approach to building the business...



...and the following transformational shifts around the three Success Levers - People, Technology and Engg. & Innovation

1. From 'Muscle Power' to **'Brain Power'**
2. Creating a **'Knowledge Workforce'**
3. **Modernizing Technology & Operations**
4. From a 'Generic Supplier' to a **'Partner of Choice'**
5. From an 'Indian Company' to a **'Global Company'**
6. **Diversified Business Model** across –
 - i. Geographies
 - ii. Industry Segments



Building a highly competitive Talent Pipeline



We promote a culture of continuous learning, skill & knowledge up-gradation across employee groups



UNDER GRADUATE STUDIES



BITS PILANI

B Sc. ,
Manufacturing
Engineering;
BITS Pilani, India

45 per year

POST GRADUATE STUDIES (Management)



**THE UNIVERSITY OF
WARWICK**

M Sc., Engineering
Business
Management;
Warwick, U.K.

22 per year

POST GRADUATE STUDIES (Technical)



IIT Bombay

M Tech., Materials,
Manufacturing &
Model Science;
IIT Bombay, India

24 per year

DOCTORAL PROGRAMS (Technical)



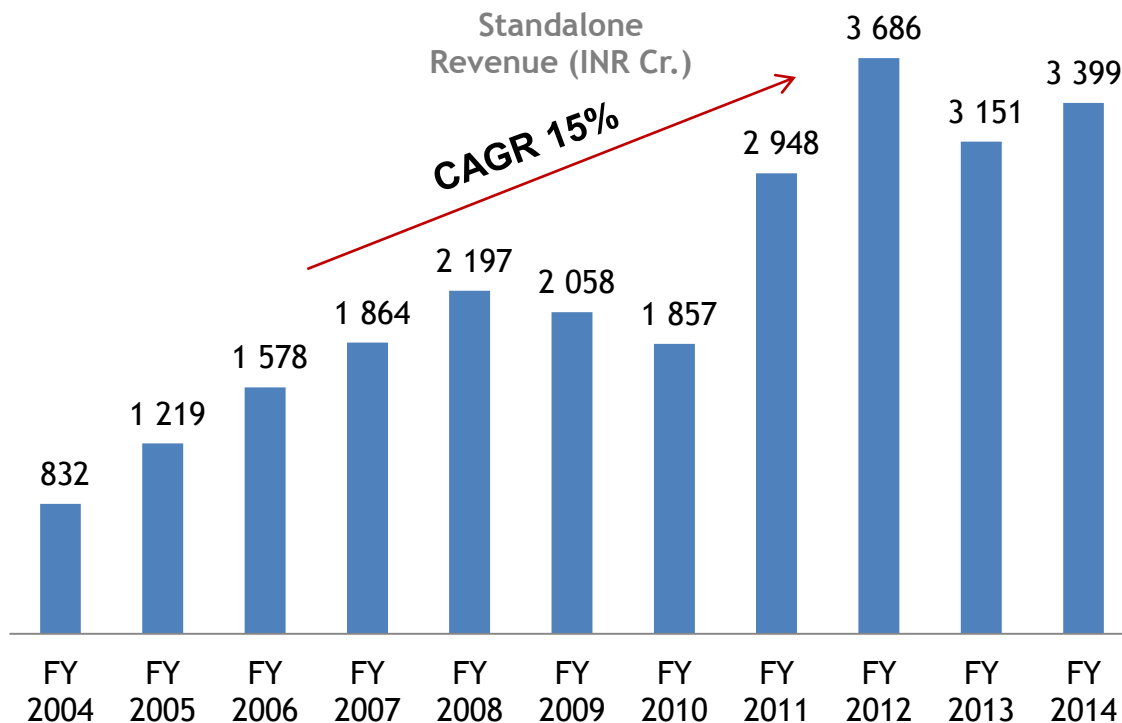
Ph.D. Program, Focused &
Generic Research;
Deakin University,
Australia

2 per year

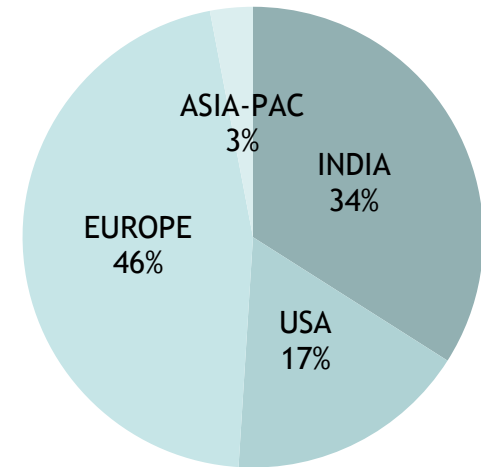
Bharat Forge Ltd: A Snapshot



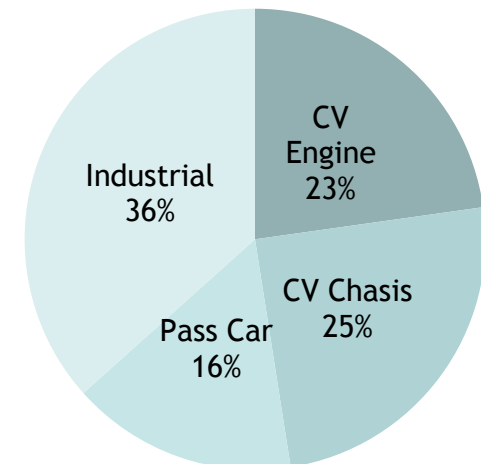
- **Consolidated Revenues: ~ US\$ 1.2 bn.**
- **9 Manufacturing locations across 4 countries.**
- **Global Marquee Customer base of more than 35 OEMs and Tier - 1 suppliers across automotive & non automotive industries**
- **No single customer exceeds 6-7% of consolidated revenues.**



Revenue by Geography
FY 2014



Revenue by Segments
FY 2014



Bharat Forge Ltd: Our Global Manufacturing Footprint



1	CDP BHARAT FORGE <i>Germany</i>
2	BHARAT FORGE DAUN <i>Germany</i>
3	BF ALUMINUMTECHNIK <i>Germany</i>
4	BHARAT FORGE KILSTA, <i>Sweden</i>
5	MECANIQUE GENERALE LANGROISE <i>France</i>
6	NA FOOTPRINT PLANNED <i>USA (Re-entry)</i>

CAPACITY
180,000 Tons

- Production base close to the customer
- Proximity to large marquee Customers
- Dual Shore manufacturing

CAPACITY
387,050 Tons

- Worlds largest single location forging facility
- Technologically advanced, flexible forging & machining facility
- Proximity to fast growing Auto markets of China & india
- Dual Shore manufacturing

- Capacity over 565,000 Tons per annum
- India Operations vertically integrated with Group Steel capability, engineering, forging, machining, etc.
- People strength 4,500 in India, 1,000 in EU

Snapshot of our European Facilities



BHARAT FORGE ALUMINIUMTECHNIK

Location : Germany
Capacity : 20,000 TPA
Sectors : Aluminium forgings for premium vehicles

Bharat Forge Aluminiumtechnik supplies aluminum chassis components such as control arms and knuckles to passenger car and motorcycle manufactures in Europe.



BHARAT FORGE KILSTA AB

Location : Sweden
Capacity : 80,000 TPA
Sectors : Commercial Vehicles

Bharat Forge Kilsta is among Europe's leading forging companies and among largest heavy duty crankshaft producers in Europe. Bharat Forge Kilsta serves the European automotive markets. Their main products include front axle beams, crankshafts, steering knuckles suspension arms for heavy trucks and passenger cars



CDP BHARAT FORGE GmbH

Location : Germany
Capacity : 80,000 TPA
Sectors : Commercial & Passenger Vehicles, Locomotives

CDP was founded in 1839 and is in the business of supplying forged and machined components, including forged power train and chassis components and is known for its design and engineering capabilities. Components manufactured by CDP - Bharat Forge include power train & chassis components such as crankshaft, control arm, pistons, knuckles for passenger and commercial vehicles and components for construction equipment such as tips and specialty components for the locomotive industry.



Global Automotive Clientele

From a 'Generic Supplier of Forgings' → 'Preferred Supplier' → 'Partner of choice'

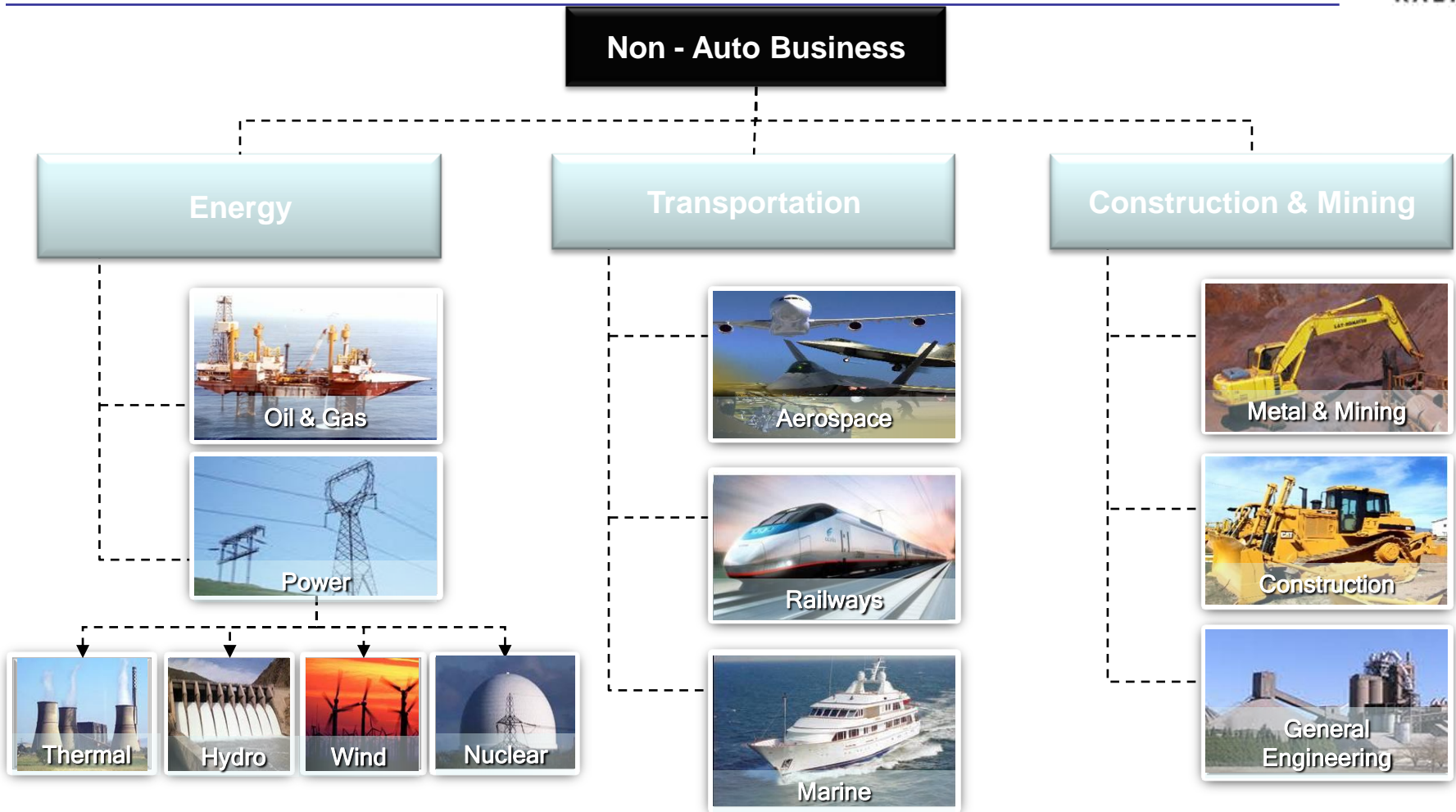


Global Industrial Clientele

From a 'Generic Supplier of Forgings' → 'Preferred Supplier' → 'Partner of choice'



New Verticals... Greater Focus... India's Growth



Supporting global core infrastructure sectors

INDIA

- ❑ **Fastest growing economy, >10% GDP growth rates; USD20 trillion GDP**
(to achieve USD 20 Trillion GDP, India has to grow at an avg. 9.65% p.a. for 25 years)
- ❑ **To be ranked among top 50 countries by 2017 in 'Ease of doing Business'**
- ❑ **Infrastructure Corridors | Smart Cities | Digital India | Renewable Energy**
- ❑ **'Make in India' – and achieve 25% Share of Manufacturing to GDP by 2022 with substantial increase in share of global exports**
- ❑ **Skill India Program and increased employment opportunities**

**Transformation of India's Manufacturing Sector Critical
to realize its aspiration to be a fast growing economy and a
developed country**

...with presence in six key sectors and manufacturing footprint spread across India and Europe



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Specialty Chemicals

- Hikal Chemicals

MAKE IN KHED CITY

India's Largest Integrated Industrial Park



PUNE & MAHARSHTRA, INDIA

- **Pune** : Bremen's sister City
 - Well established & diversified industrial ecosystem - Auto, White goods, Capital goods, IT, Electronics
 - Home to 300, world-class German Companies
 - German companies are 'Making in Pune' for over 60 years
 - Conducive climate & living habitat. Well suited for expats
 - Higher education facilities as compared to other regions/cities India; popularly known as the 'Oxford of the East'.
- **Maharashtra**
 - Top GDP contributor of around 14.7 % to India's GDP
 - One of the most urbanised state in India (44.23% of people live in urban areas)
 - Leading state in attracting industrial investments - 18% of India's domestic projects, 27% of India's foreign direct investments
 - Business friendly Govt.

Advantages at KHED CITY

- Project land acquired through the Govt. - Ensures Clear Title land
- A sustainable project meeting all Environmental Regulations
- Plug-n-Play Infrastructure - Roads, Power & Water management including treatment of waste water, skilled manpower, etc.
- Single Window for all requirements
- Attractive fiscal & non-fiscal Incentives offered by the Govt. of Maharashtra
- Attractive fiscal & non-fiscal Incentives offered under the SEZ act by the Federal Government
- Integrated township with 'walk to work' culture; A City of the Future - Residential, Health & Rejuvenation, Education, Hospitality, Sports & Entertainment, Shopping, etc.

Capability Driven Strategy to Diversify across New Industries



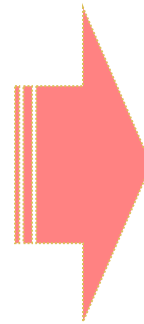
One-Stop-Shop for The Global Automotive Industry

People | Technology | Engineering | Innovation

- Engineering, Design & Product Development
- Tool Manufacturing
- Best-in-class Lean Manufacturing
- Virtual and Physical Testing & Validation

*As we expand our expertise across sectors,
our vision is to:*

*Transform from a global auto & industrial
components manufacturer to an innovation
& technology driven global engineering
systems & equipment supplier.*



Defense & Aerospace



Railways & Locomotives



Energy

Thermal | Nuclear | Hydro |
Renewables



Marine & Ship building



Oil & Gas

Surface | Off-shore | Shale



**Construction &
Mining**

The Spirit of Innovation !

The Kalyani Group strives to be a world class organization and a leader in every aspect of its business.

*The **Spirit of Innovation** fuels us to aggressively grow our businesses by accessing global markets, to deliver products and services of uncompromising quality and integrity, consistent with the Kalyani brand and image.*



THANK YOU !