INTERNATIONAL MANUFACTURING AS PART OF THE BMW GROUP.
We want to be the leading provider of premium products and premium services for individual mobility.
THREE AUTHENTIC PREMIUM BRANDS.

Sheer driving pleasure

The world’s most exciting premium small car brand

The pinnacle of automobile luxury
TECHNOLOGICAL CHANGE – TURNING A CHALLENGE INTO AN OPPORTUNITY.

In times of technological change we have to improve our existing technologies and invest heavily in new technologies to remain future proof.
MANAGING THE TECHNOLOGICAL CHANGE TO REMAIN FUTURE PROOF.

Evolution
- Efficient combustion engines
- Innovative technologies

Revolution
- Alternative drive trains
- Mobility services
NEW SUB BRAND – BMW i.

BMW i3

BMW i8
A HOLISTIC APPROACH – BMW i.
NEW PRODUCTION CONCEPT – BMW i.

External supply

BMW Plant

Internal supply

Purchased items

Press shop

Body shop

Paint shop

Assembly

CFR parts

Plastic cladding exterior

Drive module

Leipzig

Dingolfing
EXPERTISE IN CFRP PRODUCTION.
The production of CFRP components is our **core competence** – preforming, Resin-Transfer-Moulding (RTM), milling and tempering is all done in the BMW Group plant in **Landshut**. Painting and final assembly is done in the BMW Group plant in **Leipzig**.
SUSTAINABLE PRODUCTION FOR BMW i3 AND i8. BENCHMARK IN THE AUTOMOTIVE INDUSTRY.

- 50% energy
- 70% water
- 100% renewable energy
MSRP starts at 41,350 USD
Weight (DIN) 1,195kg
Turning circle 9.86m
Output 170hp/250Nm
Battery capacity 22kWh
0-60km/h (37mph) in 3.7s
0-100km/h (62mph) in 7.2s
Top speed 150km/h (93mph)

Charging times from < 30min at 50 kW fast charge to ~8h at domestic socket
Range 130-160km (80-100miles), up to 200km (124miles) in most efficient mode
BMW GROUP GLOBAL PRODUCTION NETWORK.
28 LOCATIONS IN 13 COUNTRIES.
BMW GROUP’S CLEAN PRODUCTION PHILOSOPHY.

Certified environmental management systems (ISO 14001/EMAS) at all sites worldwide

- Reducing Solvent Emissions
- Reducing water usage and process wastewater
- Saving energy and reducing CO₂ emissions
- Avoiding or recycling waste

Targeted management of environmental performance:
- Monthly recording of consumption/emission figures at all sites
- Target: 45% reduction in emissions/resource usage from 2006-2020
- Average improvement in resource efficiency 2006 - 2011: 32%
PLANTS – PRODUCTION VOLUMES 2012.

<table>
<thead>
<tr>
<th>Location</th>
<th>Production details</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dingolfing, Germany</td>
<td>Production of BMW 5, 6, 7 Series</td>
<td>332.7</td>
</tr>
<tr>
<td>Spartanburg, USA</td>
<td>Production of BMW X3, X5, X6</td>
<td>301.5</td>
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<tr>
<td>Regensburg, Germany</td>
<td>Production of BMW 1, 3 Series, Z4</td>
<td>300.3</td>
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<tr>
<td>Munich, Germany</td>
<td>Production of BMW 3 Series</td>
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<td>Oxford, UK</td>
<td>Production of MINI</td>
<td>207.8</td>
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<tr>
<td>Leipzig, Germany</td>
<td>Production of BMW 1 Series, X1</td>
<td>164.3</td>
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<tr>
<td>Rosslyn, South Africa</td>
<td>Production of BMW 3 Series</td>
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<tr>
<td>Goodwood, UK</td>
<td>Production of Rolls-Royce</td>
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<td>Dadong¹, China</td>
<td>Production of BMW 5 Series</td>
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<tr>
<td>Tiexi¹, China</td>
<td>Production of BMW 3 Series, X1</td>
<td>41.1</td>
</tr>
<tr>
<td>Graz (Magna Steyr²)</td>
<td>MINI Countryman</td>
<td>103.7</td>
</tr>
<tr>
<td>Assembly plants</td>
<td></td>
<td>38.4</td>
</tr>
</tbody>
</table>
LOCAL PRODUCTION.

- The local production is an instrument for new entries in emerging markets. In such markets, high import tariffs and taxes are not feasible for import of Completely Built-up Unit (CBU) vehicles.

- Local production enables an early presence in those markets. It is the basis for the market entry for the BMW Group and its sales.

- Implemented are solely product and structure projects which are proven to be profitable.

- Local production, brand awareness and a positive impact for the brand image lead to an increase of the group profit.

- All models comply with the same quality standards as CBU‘s.
ASSEMBLY PLANTS – PRODUCTION OVERVIEW.

**Russia: Kaliningrad**
- BMW 3, 5, 7 Series, X1, X3, X5, X6
- Beginning of production: 1999
- Partner: ZAO Avtotor
- Production volume 2012: 15,480

**Egypt: Cairo**
- BMW 3, 5, 7 Series, X1, X3
- Beginning of production: 1997
- Partner: BAMC
- Production volume 2012: 2,232

**Thailand: Rayong**
- BMW 3, 5, 7 Series, X1, X3, MINI Countryman
  - Beginning of production: 2000
  - Production volume 2012: 6,492

**Malaysia: Kulim**
- BMW 3, 5 Series, X1, X3, MINI Countryman
  - Beginning of production: 1979
  - Partner: Inokom
  - Production volume 2012: 5,448

**India: Chennai**
- BMW 3, 5, 7 Series, X1, X3, MINI Countryman
  - Beginning of production: 2007
  - Production volume 2012: 6,768

**Indonesia: Jakarta**
- BMW 3, 5 Series, X1, X3
  - Beginning of production: 1976
  - Partner: P.T. Gaya Motor
  - Production volume 2012: 1,992
CURRENT SUPPLY SYSTEM.

- USA (BMW Plant)
- Brazil (Partner) (Motorcycle)
- India (BMW)
- Egypt (Partner)
- Russia (Partner)
- China (BMW Plant)
- Thailand (BMW)
- Malaysia (Partner)
- Indonesia (Partner)
- South Africa (BMW Plant)

Supply centers: Wackersdorf (VZW), Neutraubling, Leipzig, and Duncan

- BMW Plant
- Assembly Plant

BMW PLANT CHENNAI – IMPRESSIONS.

- Production volume in 2012: approx. 7,000 U/a
- Associates: 530
- Products: 1, 3, 5, 7 Series, X1, X3, MINI Countryman
- Double shift operation
BMW PLANT CHENNAI – MODEL COMPLEXITY.
CHALLENGES - 2014.

- Further Model Increases → Complexity Management
- Logistic Process → Cost Management
- Further Localisation → Quality Management
- Vocational Training → HR Management
THANK YOU.