SAUDI ARABIA AUTO CLUSTER
December 28, 2016
NICDP is an established government agency leading the development of 5 fast growing industrial sectors in Saudi Arabia.

- Ministry of Energy, Industry and Mineral Resources
- National Industrial Clusters Development Program
  Chairman: HE Minister of Energy, Industry & Mineral Resources

- Automotive
- Minerals and Metal Processing
- Plastics and Packaging
- Pharma & Biotech
- Solar Energy

NICDP role is to support making industrial investment a reality in Saudi Arabia. To do this, NICDP has a team of experts in the target industries and extensive knowledge of local conditions.
6 pillar that makes Saudi Arabia an attractive proposition for any Automotive investment

- Modern infrastructure
- Reliable utilities
- Competitive prized raw materials
- Well-educated workforce
- Investment friendly laws
- Good Market for automotive!
NICDP Auto Cluster 4 Step Approach

Opportunity Creation
- Realization of Large regional market size
- Absence of regional manufacturing

Supporting Policies
- Creating a win/win situation for the investor and the region
- Provide world class infrastructure & training facilities

Develop Supply Chain
- Raw Material Availability
- Enhance local suppliers capabilities
- Attract international suppliers

OEM Development & Attractiveness
- Grow current OEM’s
- Attract new OEM’s that can leverage large market share advantage
Global automotive market is projected to grow from 90 to 105 million vehicle/year over the next 6 years (+17%); ME and Africa (+30%)

Global market value is 2.4 trillion USD

Source: 2016 IHS Data & OICA.net
Japanese and Korean OEM’s dominate the market with 45% of the market captured by top 6 players

**ME/AFRICA 2015 vehicle sales by brand [k units]**

<table>
<thead>
<tr>
<th>Rank 2015-2022</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015 Market share</td>
<td>11.8%</td>
<td>9%</td>
<td>7.5%</td>
<td>7.4%</td>
<td>5.7%</td>
<td>4.2%</td>
<td>3.6%</td>
<td>3.1%</td>
<td>2.5%</td>
<td>1.4%</td>
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<td>1.2%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
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<tr>
<td>2022 Market share</td>
<td>10.2%</td>
<td>8%</td>
<td>4.1%</td>
<td>9.7%</td>
<td>7.4%</td>
<td>3.2%</td>
<td>4%</td>
<td>4.9%</td>
<td>2.2%</td>
<td>1.8%</td>
<td>1.4%</td>
<td>1.5%</td>
<td>1%</td>
<td>1.2%</td>
<td>1.2%</td>
</tr>
</tbody>
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Source: IHS 2016; NICDP
52% of the current GCC\(^1\) market is between Toyota and Hyundai-Kia

### GCC\(^1\) 2015 vehicle sales by brand [k units]

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<th>Rank 2015-2022</th>
<th>2015 Market share</th>
<th>2022 Market share</th>
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<tbody>
<tr>
<td>1</td>
<td>35%</td>
<td>30%</td>
</tr>
<tr>
<td>2</td>
<td>17%</td>
<td>17%</td>
</tr>
<tr>
<td>3</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>4</td>
<td>9.2%</td>
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<td>2.2%</td>
<td>3.0%</td>
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<tr>
<td>9</td>
<td>2.1%</td>
<td>2.6%</td>
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<td>10</td>
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<td>1.3%</td>
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<td>15</td>
<td>4.6%</td>
<td>5.4%</td>
</tr>
</tbody>
</table>

1) Incl. Saudi Arabia, Kuwait, United Arabian Emirates, Qatar, Oman, Bahrain

Source: IHS 2016; NICDP
Saudi Arabia 70% of the market is between Toyota, Hyundai-Kia, Nissan and GM. Nissan is showing the most positive growth trend.

Saudi Arabia 2022 vehicle sales projections by brand [k units]

<table>
<thead>
<tr>
<th>2015 Market share</th>
<th>37.4%</th>
<th>21%</th>
<th>3.8%</th>
<th>11.5%</th>
<th>4%</th>
<th>5.3%</th>
<th>2.4%</th>
<th>1.4%</th>
<th>1.3%</th>
<th>1.2%</th>
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<th>2%</th>
<th>1%</th>
<th>1.4%</th>
<th>0.6%</th>
<th>2.7%</th>
<th>0.1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022 Market share</td>
<td>28%</td>
<td>25.3%</td>
<td>8.6%</td>
<td>7.9%</td>
<td>5.8%</td>
<td>3.9%</td>
<td>3.1%</td>
<td>2.5%</td>
<td>2%</td>
<td>1.8%</td>
<td>1.8%</td>
<td>1.7%</td>
<td>1.5%</td>
<td>1.3%</td>
<td>0.7%</td>
<td>4%</td>
<td>0.3%</td>
</tr>
<tr>
<td>CAGR 2015-2022</td>
<td>-2.5%</td>
<td>3.5%</td>
<td>11.9%</td>
<td>-3.6%</td>
<td>5.8%</td>
<td>-2.6%</td>
<td>4.3%</td>
<td>9.3%</td>
<td>6.8%</td>
<td>6.8%</td>
<td>1.8%</td>
<td>-0.8%</td>
<td>6.3%</td>
<td>0.1%</td>
<td>4.3%</td>
<td>6.3%</td>
<td>25.5%</td>
</tr>
</tbody>
</table>

242  201  74  68  49  34  27  22  17  16  15  15  13  11  6  35  2

Around 49% of Saudi Arabia market consist of the higher value SUV and P/U with C,D and E segment leading the way.

Source: IHS 2016; NICDP
Saudi car market segment breakdown and forecast

Source: IHS 2016; NICDP
Saudi market light trucks and SUV segment breakdown

Source: IHS 2016; NICDP
SUV's occupied 25% of the Saudi market in 2015. Large and Full Size SUV's were the top selling segments.
10 m.sqm Auto City in Jubail, including high quality auto infrastructure, shared services and supplier park

Close
Proximity to
Multiple Ports

Highly Trained
workforce
availability

Highly Developed
Infrastructure

Source: Team analysis; NICDP Auto Cluster
Well trained Saudi talent

- High Institute of Plastic Fabrication
  - Japanese experts educational partners
  - 1st graduating class 2009
- High Institute of Elastomers Industry
  - University of Akron (Ohio) educational partner
  - 1st graduating class 2015
- Auto Academy
## Targeted projects in the auto industry in Saudi Arabia

### Passenger Vehicles
- 3-4 OEM’s producing 400K/annual volumes

### Commercial Vehicles
- 2-3 Bus and Truck OEM’s manufacturing 20-25K/annual volumes each

### Auto Components
- Aluminum Powertrain and Structural Component Project
- Body Panels Aluminum/Steel Stamping Project
- Rubber Injection Molding Project
- Plastic Injection Molding Project - Petrochemical Conversion Company (PCC)

### Others
- Tire Manufacturing Facility
- Part Component Projects
- Implementation of industry enabling policies
Future OEM and Tier 1 plants will benefit from the conversion of basic materials produced in the Kingdom

<table>
<thead>
<tr>
<th>Materials</th>
<th>Primary Use</th>
<th>Suppliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum Auto Sheet</td>
<td>Outer and internal Body Panels and parts</td>
<td>Maaden Alcoa</td>
</tr>
<tr>
<td>Molten Aluminum</td>
<td>Wheels, powertrain components</td>
<td>Maaden Alcoa</td>
</tr>
<tr>
<td>ABS</td>
<td>Centre console, Pillars</td>
<td>SABIC IP</td>
</tr>
<tr>
<td>Polypropylene</td>
<td>Front &amp; Rear Bumpers, IP topper pads, Sill Moldings, Door claddings,</td>
<td>SABIC, SUMIKA, TASNEE – LYONDELL BASELL,</td>
</tr>
<tr>
<td></td>
<td>Door casing, Tailgate trim, Lower pillar trims</td>
<td>NATPET, APC, PETRORABIGH</td>
</tr>
<tr>
<td>Polycarbonate</td>
<td>Front grill, Door finishers, Tailgate finisher &amp; handle, IP substrate</td>
<td>SABIC</td>
</tr>
<tr>
<td>Nylon</td>
<td>Engine cover, Seat valances</td>
<td>PCC, PETRORABIGH</td>
</tr>
<tr>
<td>Polyurethane</td>
<td>Seats</td>
<td>SADARA, SABIC</td>
</tr>
<tr>
<td>Synthetic rubbers</td>
<td>Tires, rubber parts</td>
<td>SABIC-EXXON MOBILE</td>
</tr>
</tbody>
</table>
Why Saudi Arabia……Investing in the Kingdom of Saudi Arabia would result in benefiting from a number of competitive advantages

- **Strategic Location**: Saudi Arabia lies at the heart of the Middle East: 2,640 km of coastline access provides easy access to export markets in Europe, Asia and Africa.

- **Growing Economy**: Saudi Arabia has a rapidly growing economy with a GDP growth CAGR of 9% in the period 2010-15.

- **Young Population**: 31 million people, 2/3 of whom are Saudi nationals and 67% of whom are under the age of 34.

- **Talented Local Workforce**: 95% of labor is skilled: 90% of the Kingdom’s graduates are coming from programs accredited by the Accreditation Board for Engineering and Technology (ABET).

- **Access to Raw Material**: Most of the basic raw materials utilized by the automotive industry are produced in the Kingdom.
Automotive investments in Saudi Arabia has already starting and is growing

**Jeddah**

**National Automotive Industry**
- JV between Mercedes-Benz and Juffali & Bros.
- Products: Heavy-duty trucks
- SKD assembly plant established in 1977
- Capacity: 8,000 units p.a.

**Arabian Vehicles & Trucks Industry**
- JV between Volvo Trucks Corporation and Zahid Tractor
- Products: Volvo FMX and Renault Truks
- SKD assembly plant established in 1999
- Capacity: 3,000 units p.a.

**Haji Husein Alireza**
- JV between MAN CVs and Haji Husein Alireza & Co. Ltd
- Products: MAN TGA-WW trucks and semi-trailer tractors
- SKD assembly plant established in 2009
- Capacity: 3,000 units p.a.

**Suppliers**
- Technical Glass: Auto, architectural and laminated safety glass (450,000 t windshield and 150,000 t tempered glass.)
- Denso Abdul Latif Jameel: Air conditioning systems for passenger cars & pickups
- APS: Design & manufacturing of tools for Injection/Compression Moulds, Press/Extrusion Dies

**Dammam**

**Isuzu Motors**
- Products: Medium-duty, heavy-duty trucks and light-duty trucks
- Assembly started in Dec 2012
- Capacity: 2015–3,000 units p.a., to grow to 25k units p.a. by 2020

**Gulf Automobile Industry Corp**
- Products: Pick-ups, forklifts, 4 wheel motorbikes
- Assembly started in Aug 2014
- Capacity: 6,000 unit p.a.

**Suppliers**
- Middle East Battery (JV between Johnson Controls and local partner): Batteries
- SABIC Kemya: 250 kTa of synthetic rubber and carbon black
- PCC: Small plastic parts and under the hood Nylon parts – Injection Molding and Extrusion – Currently Quoting Business for Magna.

**Riyadh**

**Saudi Lamino Company**: The company is primarily engaged with manufacturing of automotive glass and produces around 800 k units for automotive application.

**National Batteries Company (NBC)**: Maintenance free, premium hybrid and standard hybrid batteries

**OEM**
- In discussions with 2 OEM

**Suppliers**
- Have discussed in the past with number of major suppliers willingness in setting up operations once the OEM agreement are in place
Successful Manufacturing Cases in Saudi Arabia

**Aluminium Project**
*Ma’aden - Alcoa JV*

- US$10.8 billion Investment
- JV signed: Dec 2009
- 25 months construction

- Smelter SOP: Dec 2012
- Rolling Mill SOP: Dec 2013

- Plant has 1,400 employees of which 70% are Saudis
- More than 700 Saudis have completed intensive training to qualify as smelter operators

**Kemya Polymer plant**
*ExxonMobil - SABIC JV*

- Kemya JV is 30 years old.
- Saudi workforce meets the ExxonMobil global standards on all metrics
- Recent $3.4 billion expansion completed on budget and with over 90 million safe work hours
Successful Manufacturing Cases in Saudi Arabia

**MAN**

*Production started January 2009*
- Production capacity: 3,000 per annum

**Mercedes Benz**

*Over 40 years presence in the Kingdom*
- Production capacity: 8,000 per annum

**Volvo**

*Production started in 2014*
- Production capacity: 3,000 per annum
- Introduced Renault Truck in 2016 August
Successful Manufacturing Cases in Saudi Arabia

**Isuzu Truck Assembly Saudi Arabia**

*Production started December 2012*
- Production capacity: 5,000 heavy & medium weight trucks.
- Expanding to 25,000

**PCC Automotive Components**

*Production started in 2013*
- Under the hood Nylon parts
- Small plastic interior parts
Current incentive mechanism which can be extended even further for special projects like Automotive

**Tax incentives**
- Low 20% corporate income tax on profits only
- Special tax deductions for projects in developing regions

**Low cost industrial land**
- MODON: $0.27-1.07/m²
- RCJY: $1.2/m²
- KAEC: $3.7/m²

**Low power tariff:**
- Industrial kWh cost: $0.18

**Sales support**
- Govt. procurement favors local production

**Import tariff Exemptions**
- Most components
- Raw materials
- Plant machinery & equipment

**Low cost industrial loans up to 50% of capital and 20 years term (SIDF)**
- Export Financing & guarantees (SEP)

**50% Salaries support for new Saudi Arabia employees (HRDF):**
- 1st year: $1067/month
- 2nd year: $800/month
- 3rd year: $533/month
- 4th year: $267/month

**Training support for new Saudi Arabia employees (HRDF):**
- $533/month, for 24 months.

**Current incentive mechanism which can be extended even further for special projects like Automotive**