

# Government policies driving Aluminium usage in auto industry

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Aluminium Association of India

**A**luminium Association of India (AAI), established in the year 1981 is the apex body representing the entire spectrum of Indian Aluminium Industry— Primary Producers, Downstream Manufacturers, Endusers, R&D Organisations, Technocrats and prominent Academicians and continuously enjoying the patronage of Ministry of Mines in all its activities serving Indian Aluminium Industry. The association's mission is to make Indian Aluminium Industry a competent Global Player; to upgrade, adopt world class technologies; and to help improve quality of products and services.

Currently Professor KSS Murthy is the Hon. General Secretary of Aluminium Association of India. He has retired as Professor of Mechanical Engineering, Indian Institute of Science, Bangalore and is Chairman of the Central Workshop (a central fabrication facility for the Institute) and was engaged in teaching and research in metal casting and metal joining. Actively engaged in advising various Ministries in Government of India and has been responsible for initiating several nationally important projects such as Aluminium Mission Plan, Technology Roadmap for Indian Aluminium Industries,

“The aluminium industry looks forward to support from the government during this critical phase to maintain its viability and to protect its growth plans”, says **Professor KSS Murthy, General Secretary of AAI** in an exclusive interview to **Metalworld**. Excerpts:

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**What are the objectives and activities of Aluminium Association of India?**

We have always projected proactive views focusing on the principal objective of increasing aluminium production and consumption in the country. Further, we have had the privilege of participating in several key functions / activities of government of India by way of presenting views on Budget, Five Year Plan document, Pollution Policies, Trade Agreements, Manufacturing and Promotional Programmes etc.

Also, AAI being the member of World Body of Aluminium Associations and having signed Memorandum of Understanding (MoU) with the Aluminium Association of America, the world's leading aluminium industry, we do avail advice / suggestions from the International Aluminium Associations with a view to understand India's position in the global scenario and the desire of India in becoming a global player in International scenario. This will also help India to become a major outsourcing country in global market.

**What is the current scenario of aluminium industry in Indian context as well as globally?**

Aluminium industry plays a very important role in nation's economic growth and progress.

**Investment done by Primary Producers:**

Rs. 1.2 Lakh crore invested taking the total production of Primary Aluminium from 2.1 million to 4.1 million TPA by Fy17

**Employment Generation**

More than **7.5 lakh** people : directly or indirectly with current production capacity of 2.1 mn TPA of Primary Aluminium . Employment will double with new capacities.

**Growing Consumption:**

India's Aluminum consumption : increase from 2.7 mnTPA in 2015 to 3.2 mnTPA by 2018.

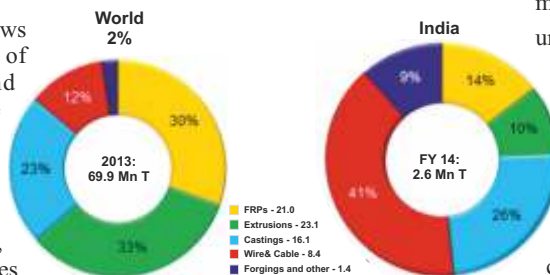
While the industry is implementing these plans, it is unfortunately facing a barrage of issues, including depressed realizations, increased imports and difficulty in accessing critical resources like coal and bauxite due to delayed clearances. The industry looks forward to support from the government during this critical phase to maintain its viability and to protect its growth plans.

**Aluminium Consumption – Product form wise**

FRP + Extrusion in India is just 24% vs Globally 63%

Source: CRU, Indian Industry data

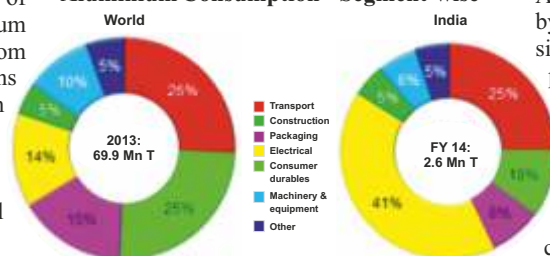
**Aluminium Consumption – Segment-wise**



FRP + Extrusion in India is just 24% vs Globally 63%

Source: CRU, Indian Industry data

**Aluminium Consumption – Segment-wise**



**Electrical segment still dominant in India. Building & Construction segment holds huge potential for growth**

Source: CRU, Indian Industry data

**What is the future prospect of Aluminium Industry in India?**

Economic growth will turnaround

- Rapid urbanisation : coupled with vertical growth in major cities .
- India's GDP per capita is growing as is life time value products like Aluminium (1990:\$324/0.5kg 2013:\$1495/2.1kg)
- Rising disposable income : purchasing power .
- Demographic profile : large young working middle class – highly aspirational.
- Strong manufacturing sector – backed by a robust domestic market and encouraging global market.
- Favourable investment climate will surface again. Investments in power and infrastructure.

**FAST GROWING APPLICATION SECTORS**

**Aluminum in Building Architecture/ Infrastructure**

By 2020, the construction sector in India is projected to emerge as the largest end use sector for Aluminium. The overall consumption by the sector is estimated to grow at a CAGR of 18-20%, to around 1700 kt by 2020. This sector holds ample promises for the future of Aluminium in India, provided

investments are channelized into modernization and expansion of fabrication units, catering to the Construction sector.

**Aluminum in Transport Sector**

With high fuel prices and stress on global warming, automotive manufacturers are leaning towards weight reduction, and hence use of more Aluminium in vehicles. Additionally, Aluminium also has good impact absorption quality. The developed countries have on an average 140 kgs of Aluminum per vehicle and India is at 40kgs levels. The Automotive Industry in India is expected to grow 4-5 times from USD 34 bn to USD 150 bn by 2016.

A further contribution to road transport is made by aluminium as the universal material for road signs, and by its increasing use in motorway parapets and bridges.

**Aluminium is an asset for anything that travels ...**

- Cars: 1 kg of aluminium replacing conventional materials eliminates 20 kg of Co2 over the vehicle's life
- Railway wagons can use up to 5 tons of aluminium / wagon; investment recovered through fuel efficiencies in 2.5 years
- Al already accounts for 60-80% of aircraft weight; its use deepening further

**Aluminium in Power**

The power sector is currently the largest consumer of Aluminium in India. Bulk of the Aluminium usage is in overhead conductors and power cables used in generation, transmission and distribution of electricity. With the continued growth in the power sector, particularly in the eleventh five year plan, Aluminium usage in the power sector will continue to be predominant.

**Aluminum in Packaging**

The contribution by the packaging sector is estimated to be in the range of 15-20% of the total Aluminium consumption, in line with Global trends, by the year 2020, with the Aluminium demand projected to be about 350 kt. Applications like usage in rigid food containers, cans for chemicals and insecticides, etc. will increase Aluminium consumption in the packaging sector. The demand growth in India for aluminium metal will be in the range of 13% to 15% every year. The demand of growth of aluminium metal in India will still outpace the general growth rate in the economy. It will touch almost 13% to 15% of the growth rate. The other sectors which are emerging very fast are the transport and the packaging sector in India. In the transport, particularly the new generation cars .



## GROWTH IN APPLICATION SECTORS

<p>Today, 35 per cent of Indian aluminium is consumed by the power industry, compared with less than 10 per cent in USA and Japan.</p> <p>Areas like construction and packaging where global aluminium consumption thrives has low relevance to India. Barely 6 per cent of the aluminium finds its way in the construction industry compared with 17 per cent in USA and 25 per cent in Japan.</p> <p>Aluminium metal demand to grow at double digits for the year, as automobiles, construction and power sectors continue to boost metal consumption.</p>	<p><b>Market Driving Downstream Opportunities</b></p> <ul style="list-style-type: none"> <li>• Railway Wagons</li> <li>• Two Wheeler</li> <li>• Aerospace</li> <li>• Cans</li> <li>• Buses /Trucks/Cars/ 2-wheelers</li> <li>• Premium / Branded Windows</li> </ul>
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due to fuel economy as well as the growing awareness about the fuel efficiency of using aluminium metal in the buses, trucks as well as in the railway wagons and passenger coaches that will trigger the demand and there is immense potential of such consumption in India

### How is Aluminium Association of India helping the industry to upgrade technically?

AAI is responsible for the growth of Aluminium Industry in the country

- By disseminating vital information on technological developments and on various applications of aluminium, all of which are significant to India via National & International Seminar/Workshop/Conferences.
- By providing statistical / Techno-commercial information on aluminium to the members, Government etc. through print and electronic media.
- By offering advice on technical problems, marketing issues etc.
- By forwarding large number of enquiries received from within country and abroad regarding various aluminium products. Also, by forwarding enquiries received from foreign embassy of the country.
- By interactions with Overseas Association like European Aluminium Association (EAA), International Aluminium Institute (IAI), The Aluminium Association, USA, Japan Aluminium Association, The Brazilian Aluminium Association (ABAL) etc & provide linkages for Indian organisations with Overseas organisations for Technology transfer, Technology upgradation and development of end uses.
- By arranging visits / participation by AAI members in various International Conferences / Seminars.

### What are your expectations from the government on the policy front for the Aluminium Industry?

- Take appropriate measures to remove obstacles coming in the way of growth of aluminium industry especially in Primary metal industry as well as downstream sector
  - Recognize Aluminium Industry as a 'Core Industry'
  - Discourage export of bauxite
- Promote accelerated domestic consumption of aluminium with appropriate and justified projection
- Encourage Research and Development

industries, with adequate funds which is the key to the growth of aluminium industry

- Adoption of the document - Aluminium Mission Plan 2012-2022 & Beyond
- Revival of Committees - Aluminium Development and Promotion Council & Aluminium Utilization Committee
- Interaction with other Ministries to promote aluminium in various sectors - Transport, Power, Packaging, Building and Infrastructure etc.

