

Economy of Mining Industries & Related Issues to Selling Raw/Crude Materials in Iran

2-3 August 2018

Iran Non-Ferrous Industries Market & Related Technologies Conference

Tehran, Iran



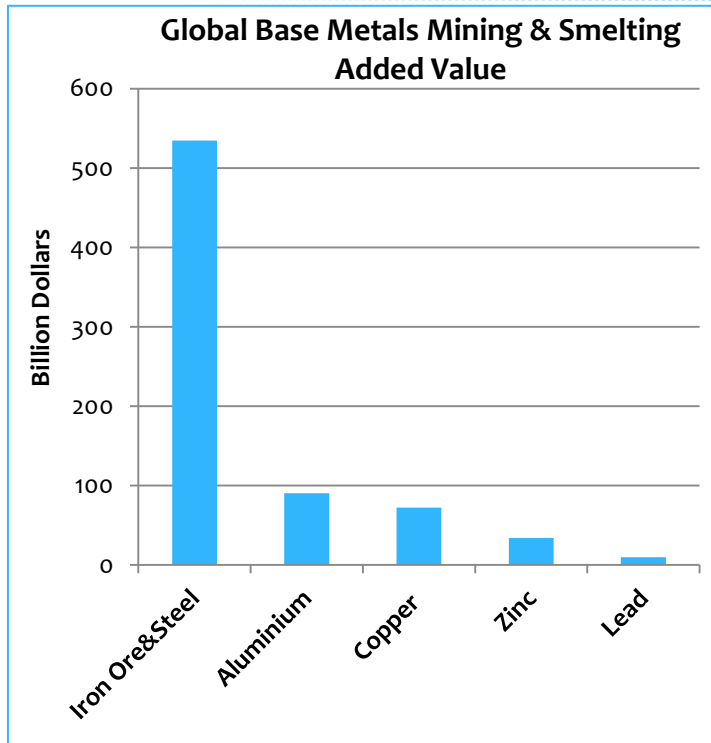
Content

- Iran's Position among World Non-Ferrous Metals Producers
- Non-Ferrous Metals Value Chain Economy & How Giant Producers Work in Non-Ferrous Industries
- Definition of Raw/Crude Material & Issues about this definition
- What Should We do to Complete the Value Chain in Non-Ferrous Industries?

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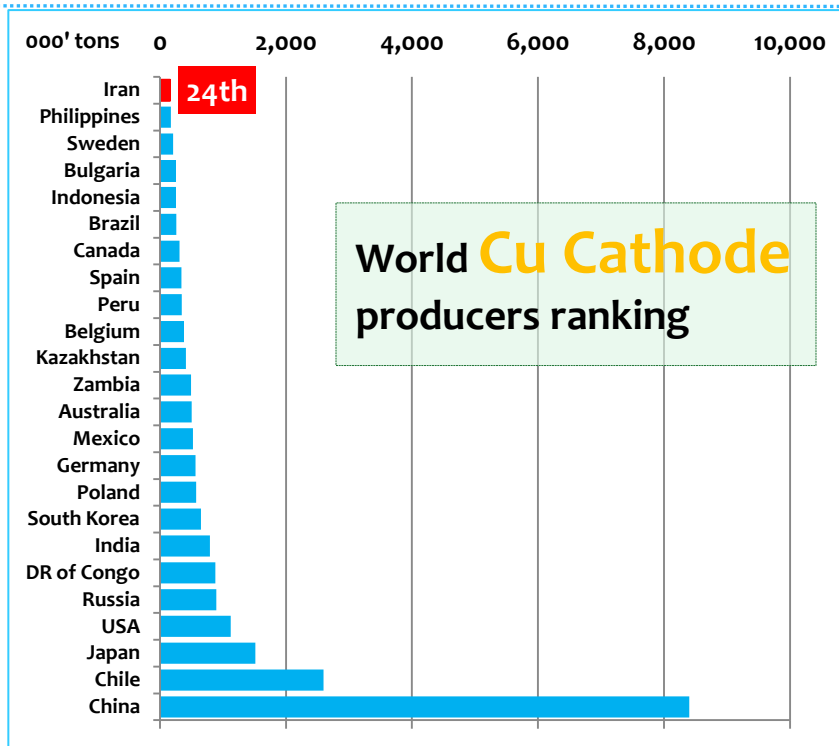
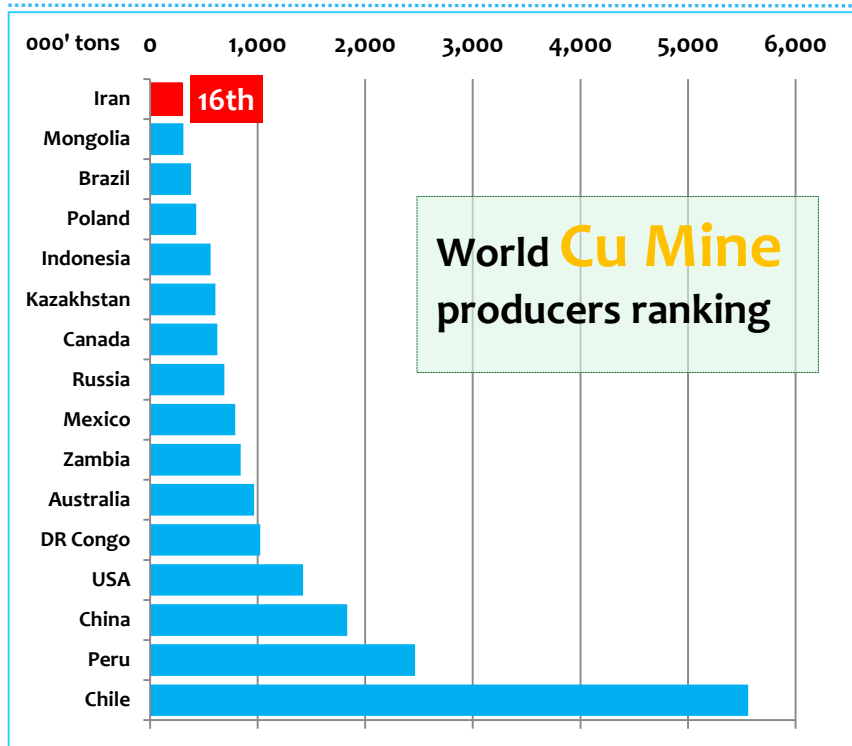
In the 2017, the value added of the base metals mining industry was about 740 billion dollars.



- * In 2017, nearly 1.6 billion tons of iron ore and 1.7 billion tons of crude steel were produced in the World.
- * The production of bauxite, alumina and aluminum was 300 million tons, 126 million tons and 93 million tons, respectively.
- * In the copper industry, 20 million tons of mining copper and 23.5 million tons of cathode were produced.
- * Mined and metal Zinc production was 13 and 13.2 million tons respectively, and the production of mine and metal lead respectively was 4.7 and 11.5 million tons.

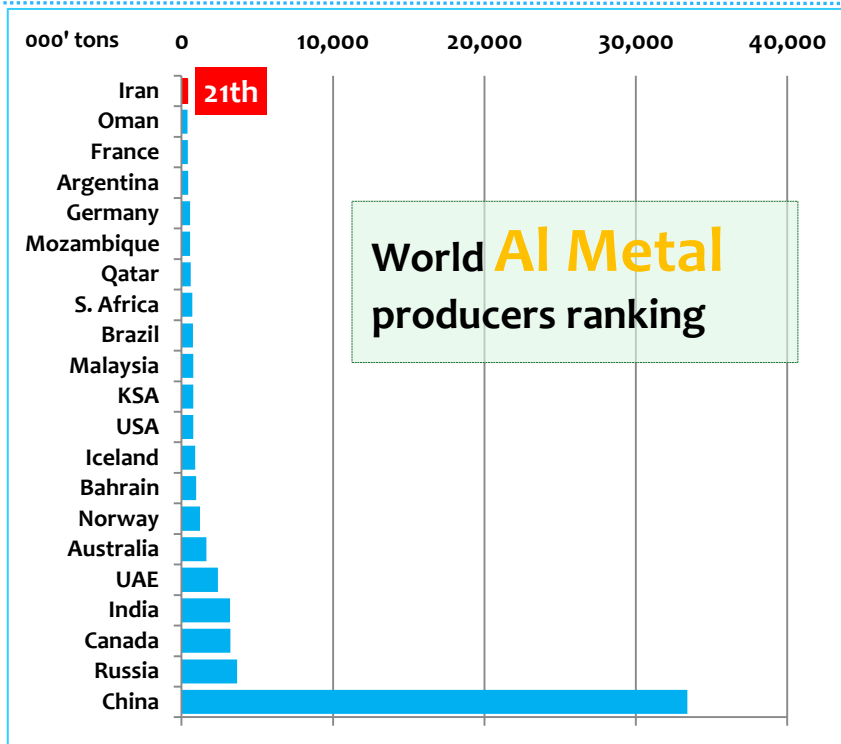
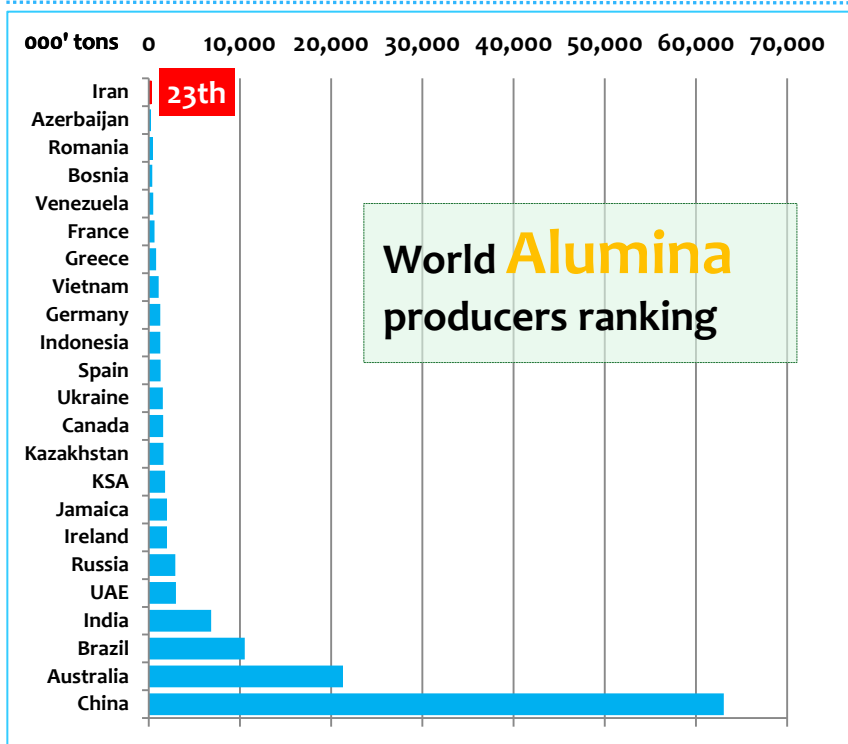
Where does Iran stands in Cu Industry?

Iran is the largest mining copper producer in ME and the 16th largest copper producing in the world.



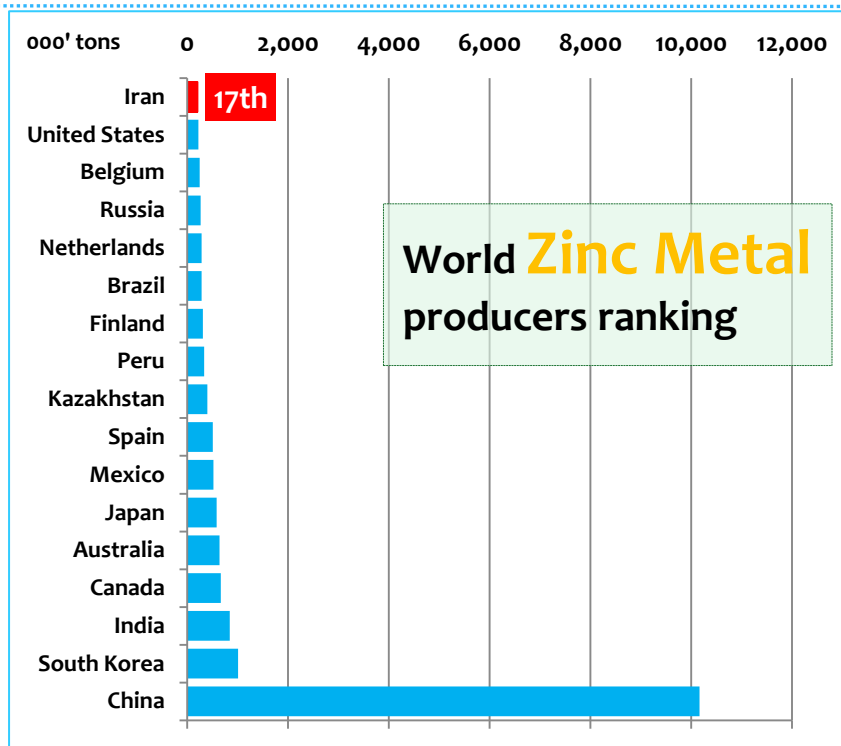
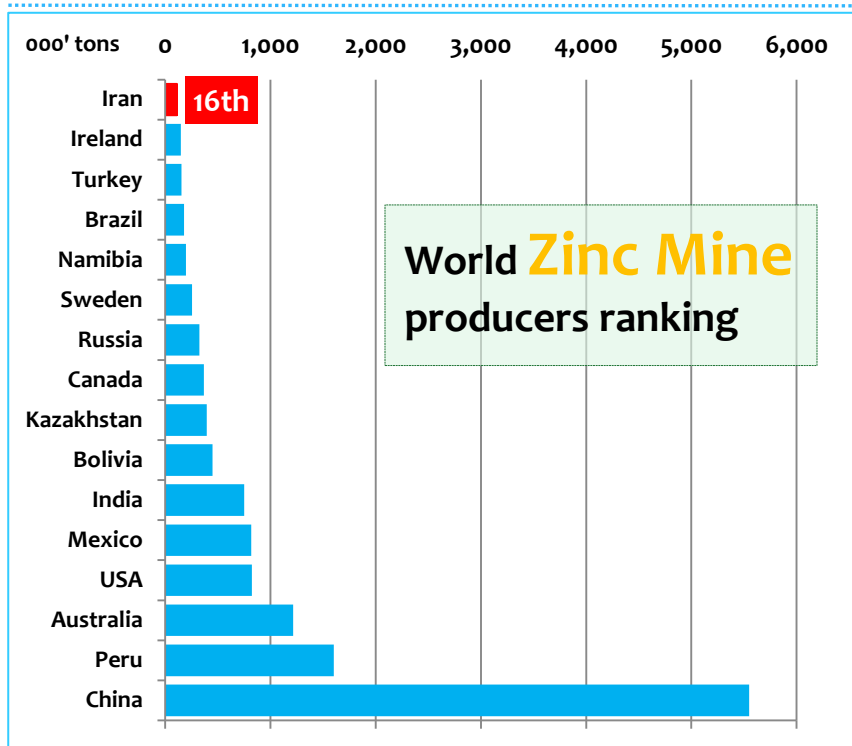
Where does Iran stands in AI Industry?

Iran has low mineral bauxite reserves and a narrower growth in the aluminum industry than in the region.



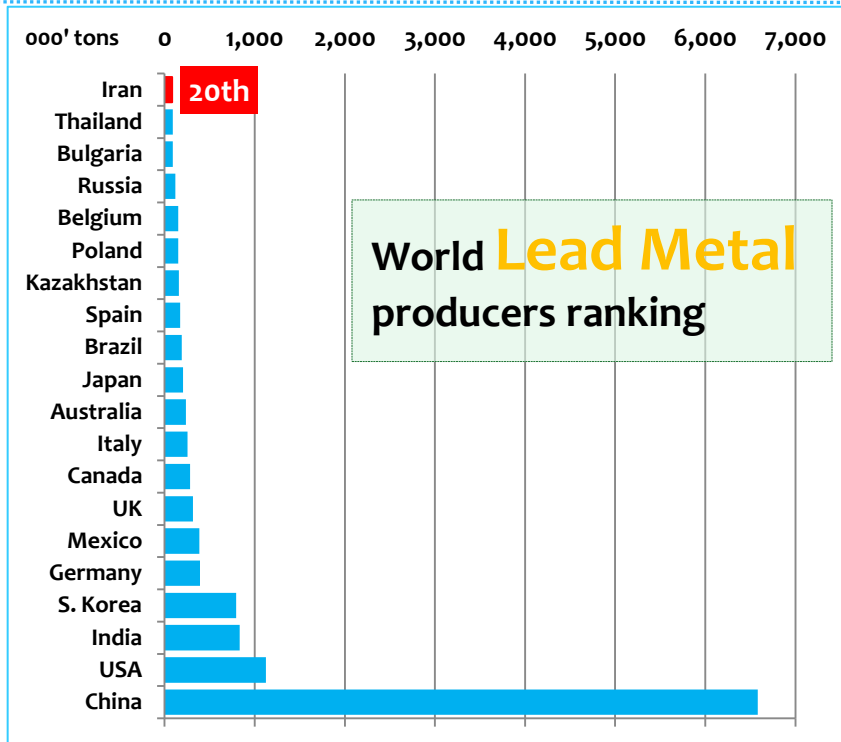
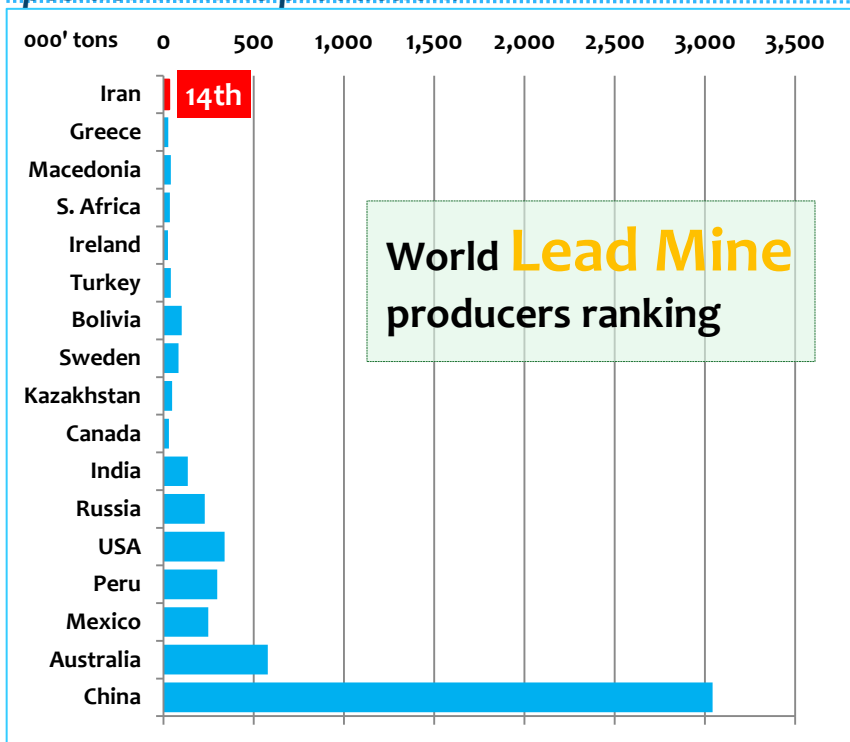
Where does Iran stands in Zn Industry?

Oxidic resources of Zinc is being depleted and Iran needs shifting to utilization of sulphuric resources.



Where does Iran stands in Pb Industry?

Weak recycling has shifted Iran to low-ranking position among metal producers in spite of its robust position in mine production.



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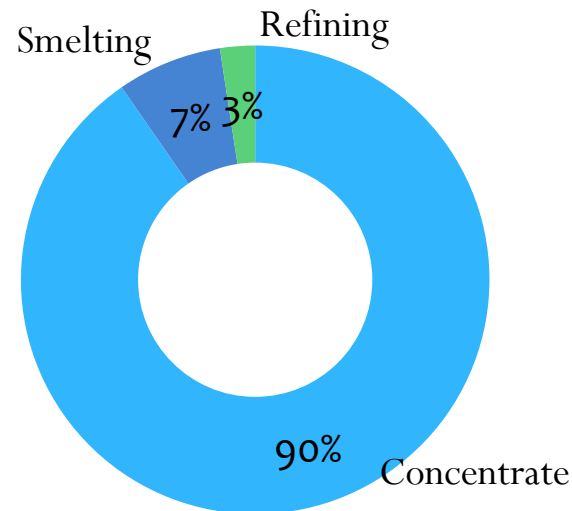
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What the Giants do in Cu Market?

Concentration has the major share in margin profits of upstream sector in Copper industry.

- Entrance of Asian countries, particularly China, has pressured TC/RCs during last decades and consequently has impacted the profitability of smelters and refineries.
- Major profitability in upstream sector of Copper industry has been focused in concentration which drives explorations and expansion of mining sector.

Margin Share in Supply Chain (2017)

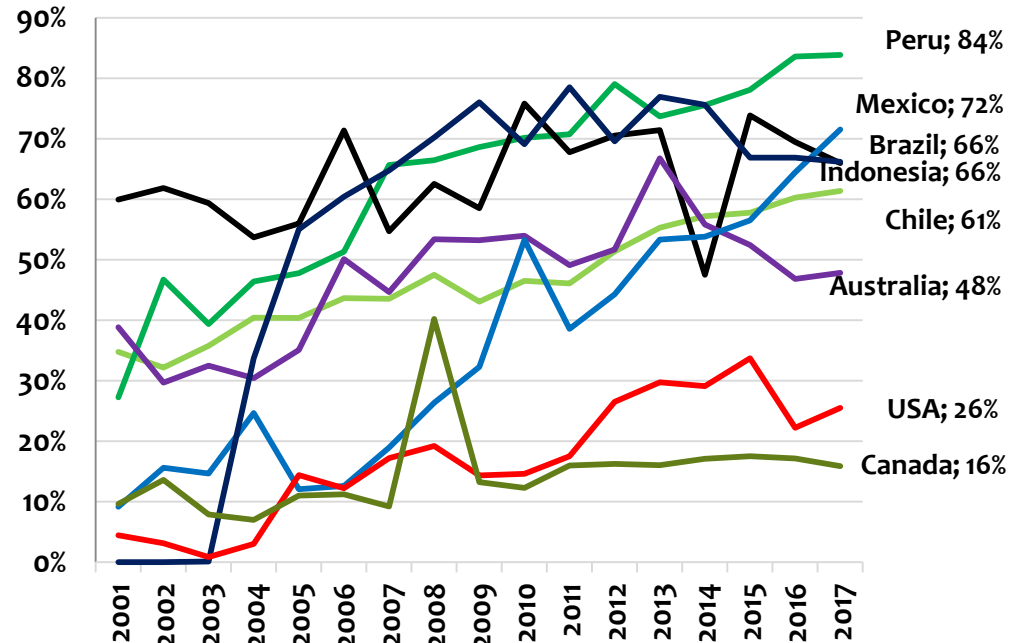


What the Giants do in Cu Market?

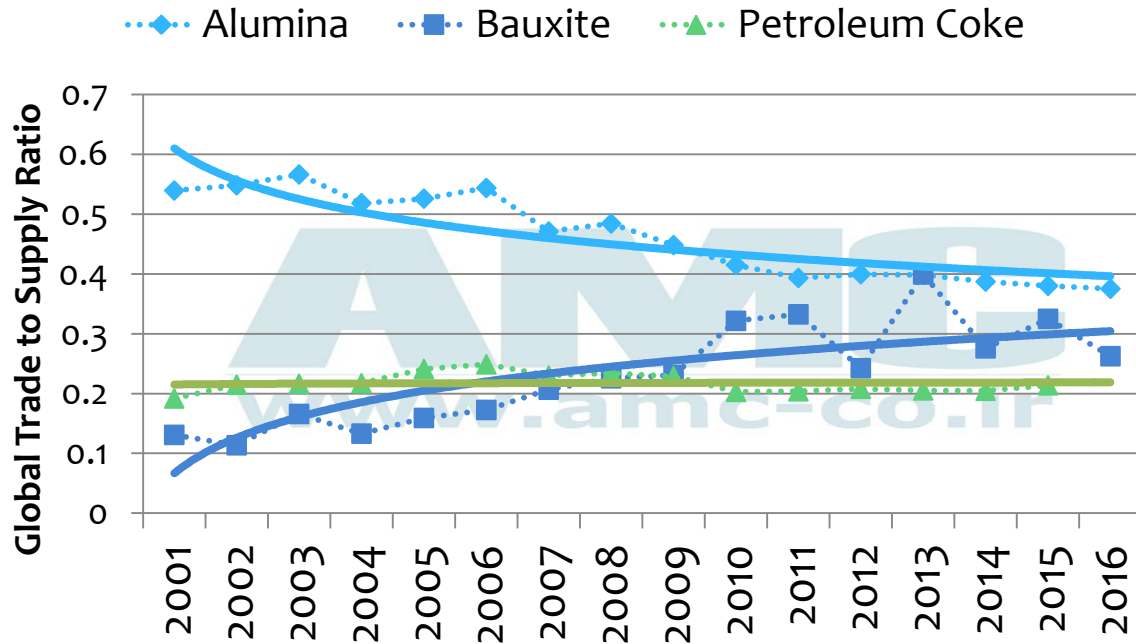
In the Recent years, Copper Concentrate Exports have grown in Producer Countries.

- The low Copper Smelting & Refining Profit Margin has Driven the Geography of Copper Smelting into Consumer Countries like China.

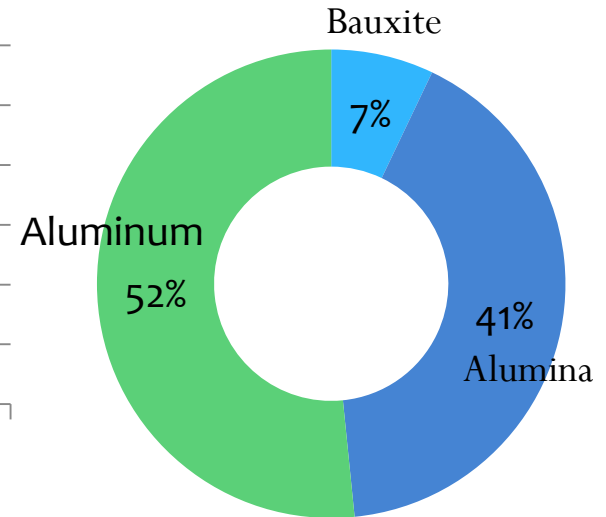
Copper Concentrate trade to Supply Ratio



Significant margin of alumina refineries in comparison with bauxite mining, has encouraged production instead of purchasing.



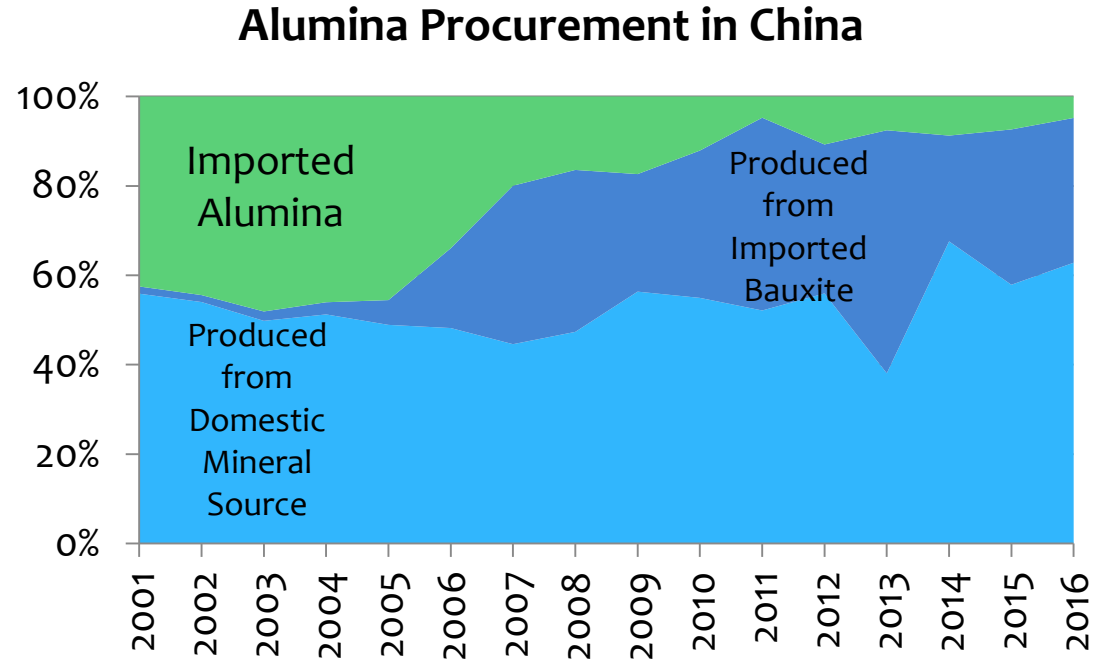
Margin Share in Supply Chain (2017)



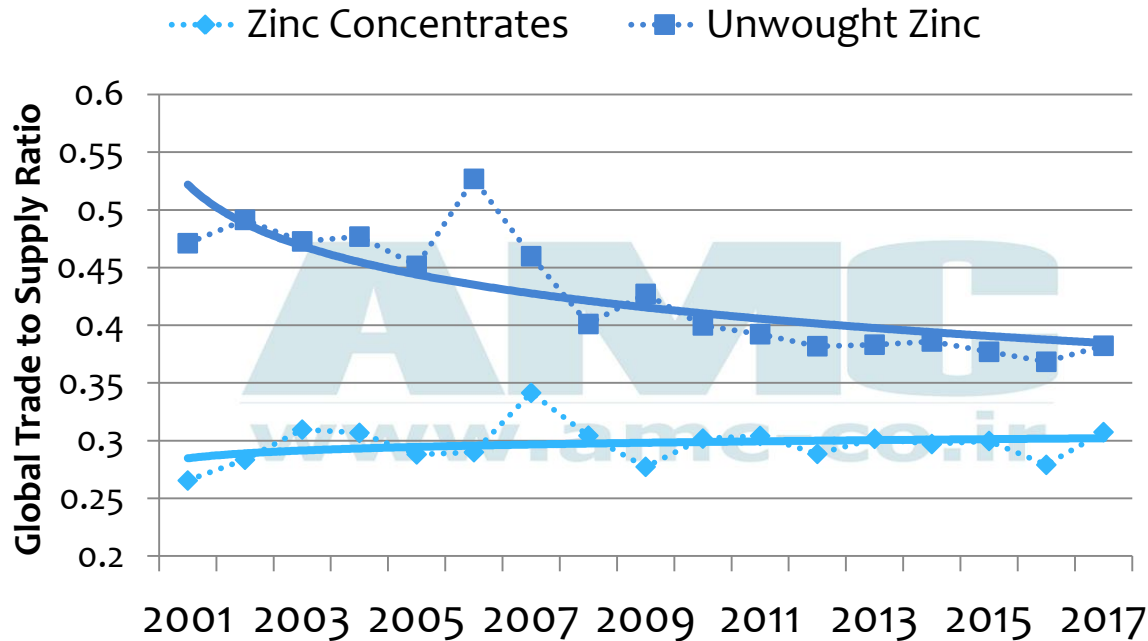
What China does in AI Market?

Bauxite tastes better to Chinese producers in comparison with alumina.

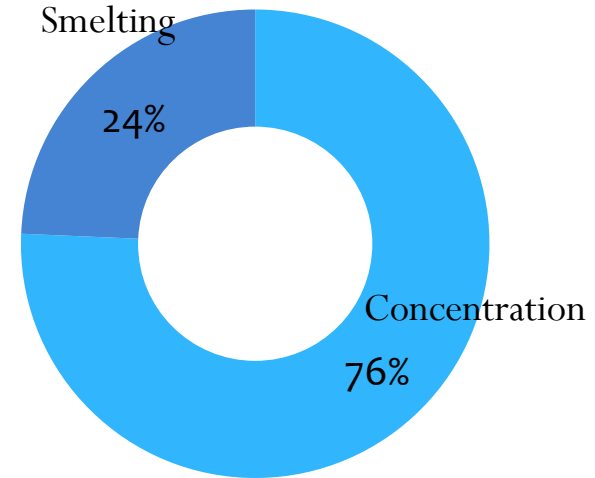
- China prefers importing bauxite instead of importing alumina, so that it can gain more by significant margins of refining.
- Almost all the alumina produced in China, is consumed domestically.



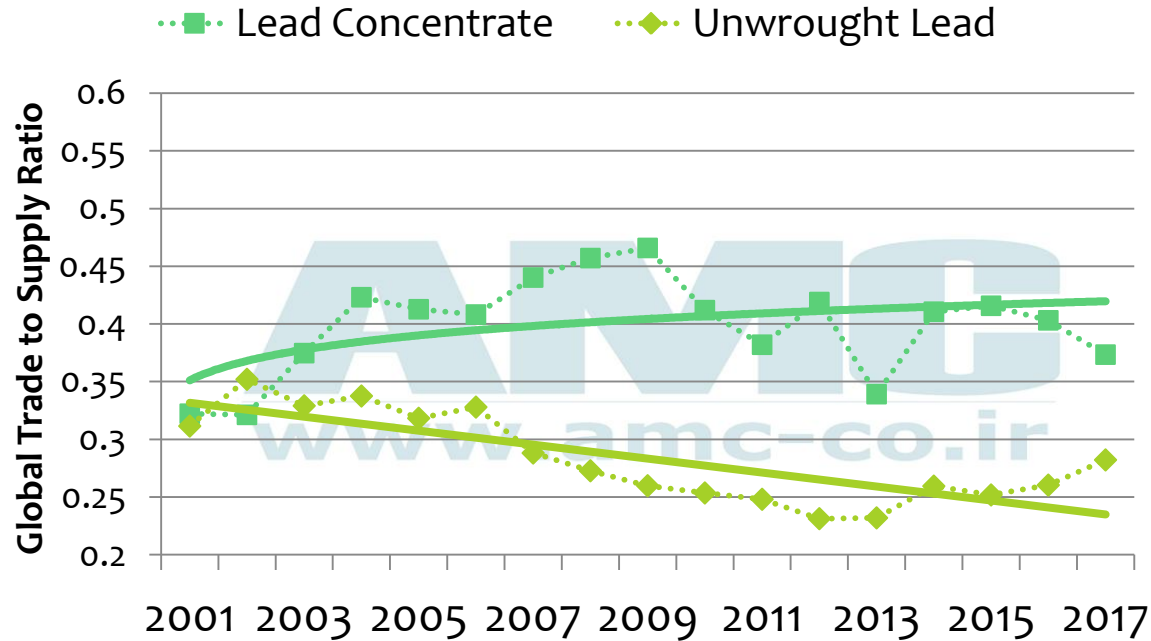
Concentration owns major profitability in upstream sector of Zinc industry



Margin Share in Supply Chain (2017)



Profit margins in Lead concentration has encouraged its trade



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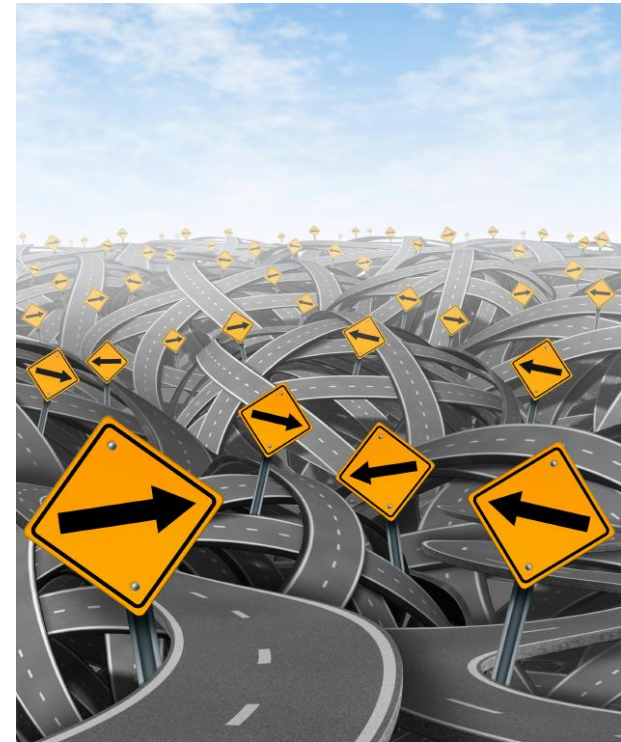
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Crude Material or Not? That's the Problem!
We do not have a Bright Definition for Crude Material

Crude Material or Not? That's the Problem!

We do not have a Bright Definition for Crude Material

- * The Government does not have a Specific Policy Based on Economic Indicators in the Mining Sector.
- * There is no Clear Statistics data on the status of the Country's Mining Industry.
- * There are no Authorized Economic Consulting Companies in Iran & Proper Research Work is not done for Policy making.
- * The Private Sector does not have Enough Awareness of the Global Economy of Industry & less Involved in Government Decisions.



An Example of what to do in the World

What does USA do to decision making?

- * President Proposes **\$860 Million** USGS Budget for FY2019. President today proposed an **\$859.7 million** Fiscal Year 2019 (FY19) budget for the U.S. Geological Survey, which prioritizes effective stewardship of America's natural resources and scientific inquiry. Feb 12, 2018
- * In 2010, The United States International Trade Commission, produced a **166-page report** with more than **200 pages of attachment from meetings** to decide on the application of anti-dumping laws on importing copper tube from China.



Copper Development
Association Inc.



Seamless Refined Copper Pipe and Tube
from China and Mexico

Investigation Nos. 731-TA-1174-1175 (Review)

Publication 4650 November 2016

U.S. International Trade Commission



Washington, DC 20426

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What Should We do?

- We must apart form considering past plans, **think, think, think** and reprogram.
- Because of different economics, there must be different policies for the mining industries.
- Comprehensive studies should be conducted to provide transparent statistics and determine the proper policies of the country's mining industry.
- According to the Value Added of different production stages, a definite Policy for the definition of Crude Material should be defined.

A close-up photograph of a hand moving a dark grey chess piece (a king) on a light-colored chessboard. The background is blurred, showing other chess pieces and the hand's fingers.

Thanks for Your Attention

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