



2015 Rare Earth Conference in Singapore

Incentives for illegal mining are getting less

Illegal mining has played an important role in this year's Rare Earth Conference. The overall estimation still sees a 40% share in China's total output. A number of different Governmental measures did not really work out so far. A much better control is expected by the consolidation of the market. Yettie Yi from Shanghai Metals Market pointed out that consolidation into 6 big groups will certainly help to improve the overall situation. But she also made clear that it is still a long way to go until the market will be cleared up. Whereas 5 provinces have already completed consolidation there are still 4 that have not. And here lies the problem as some provincial Governments appear to still supporting illegal mining and recovery. However, Chinese Government has just started intensive inspections to wipe out illegal activities, mainly focusing on unregulated recycling of rare earths in southern China. It is still uncertain to what extent this will be of success and helping the market to improve but there is a lot of hope in this.

With export quotas and export duties both being cancelled in the first half of this year at least the advantage for smuggling has been reduced to some extent. But this has also effected China's household. World-renowned guru Professor Dudley Kingsnorth pointed out that in the past Chinese Government collected some 500 Mio. USD on export taxes every year. A compensation for that is expected from the newly installed resource tax which, however, appears not to be in place yet.

Global rare earth industry

There is general agreement that the Chinese mining and recovery industry is heavily subsidised. For example the enormous costs for protecting the environment are just not reflected in current market prices. To allow a break-even situation prices should be much higher than what we see today. And that makes it almost impossible for Western

mining companies to get a share in the market. The actual situation does not attract investors at all to support activities outside of China. A lot of money has been destroyed over the last couple of years with many projects being stopped. Lynas appears to be productive these days but will this be sustainable? Not to mention Molycorp who have suspended production for the last 2-3 months.

Growing demand expected

Indeed the 2011 price bubble has led to a huge campaign of process optimizations. According to Prof. Kingsnorth demand per unit could be reduced in many applications. But this has come to an end now and with new technologies further developing a continuous growth is expected for the next 10-15 years. Although not all the elements may benefit in the same way there is general consensus that certain rare earth metals will see significant growth rates in coming years. In particular this applies for the magnet metals Neodymium, Praseodymium, Dysprosium and Terbium. For this application Prof. Kingsnorth predicts a 50% growth over the next five years.

Driving industries will be renewable energy and automotive. By 2020 electrical and hybrid vehicles are expected to account for 5.5% of global vehicle sales.

The overall rare earths demand is expected to reach 280,000 tons by 2025 compared with 150,000 tons in 2015.

Impacts of the VW crises

The analysts from Roskill predict that the VW scandal will have a positive impact on the use of rare earth metals in the automotive industry. In order to reach the more stringent and wide-reaching emission regulations a greater consumption of rare earths per auto-catalyst unit will be required. Most of today's technologies use Cerium, Lanthanum, Yttrium and Neodymium in their auto-cats.