

## What could be the role of junior mining in the development of sustainable resources in critical metals?

*Christian Polak, Strategy & Business Development, AREVA Mines, Paris*

The last 20 years, raised the necessity for our industry to pay attention to the sourcing of "Critical" Metals from Mines.

Curiously, this domain was dominated by Chinese companies within China and outside. Western companies in the industry or market place tended to be small to mid-cap juniors, there were no large blue chip miners. The "classical" business model applied to the development of the critical metals industries, namely tantalum, tungsten, rare earths, scandium, rhenium.., has proved to be unsustainable. How can we change it?

It appears one common characteristic is the relatively small market of those metals and from ore to end use. The lead-time involves an agenda of investment and financing to develop the value chain which is generally not synchronized.

End-users and junior miners have to work together to create a symbiotic relationship. Where the off-take of production, the support of end-users in front of financial institutions, the guarantee of supply, the life-time of the mine, feasibility studies based on realistic pricing, are not mutually exclusive.

On top of that you have a disparity in the definition of the level of investment applied by junior miners and end-users.

It is necessary for miner's intermediaries, expert consultants and traders to be an integral part of the whole value chain. For it to function efficiently good communication between all is the key.

The uranium industry, from its experience in dealing with long-term contract on mines or end-use and capitalization could bring solutions. There are also similarities between the uranium and tungsten or rare earths industries in that the volumes mined, compared to other commodities, are relatively small.

New ways of development and a new business model have to be explored and implemented for a sustainable and successful future for those metals.