

## A little sangria with that, sir? Thursday, 14 August 2014

**THE Iberian Peninsula is relatively agreeable and quite full of minerals. What's not to like? *The Outcrop* by Robin Bromby**

With the Ebola virus spreading through west Africa, costs in Australia making exploration less attractive and the discomforts associated with working in so many parts of the world (including dodgy airports and airlines), perhaps Europe is worth a thought for any junior looking for an engaging story that may just support a placement or rights issue.

Already one company has decided to pick over some old French gold workings. If your taste runs more towards strong German beer and apfelstrudel, then the former East Germany could be worth a look. There's heaps of coal in Poland, uranium in Slovakia, zinc in the Balkans and no end of minerals in Sweden. Australian explorers and miners are well entrenched there.

But really, for a combination of mineralisation, climate and lifestyle, you have to like the sound of Spain and Portugal. And some clearly do: we have Highfield Resources with its potash projects in Spain and Plymouth Minerals – which seems to have put its rare earth disappointments well behind it – is working on a tungsten project there.

Which brings me to the point. In the post this week was the latest newsletter from the International Tungsten Industry Association, which goes into a detailed description of the historic Panasqueira mine in Portugal.

But just before we get to that, the newsletter reports that a team at the Vienna University of Technology has managed to produce ultrathin layers of tungsten and selenium, which may be usable in flexible, semi-transparent solar cells.

Interestingly, the people from ITIA went to have a look and concluded that this new material may be better suited to solar cells than the much-lauded graphene.

But the main article concerned the historic mine in Portugal, which is now owned by Japanese trading house Sojitz. (It is interesting to note that Japanese companies have been very keen to get involved in tungsten projects. They have fingers in the pie here in Australia and a CEO of a company that has tungsten in northern Europe told me that Japanese interests had shown great interest in the project. Tungsten production is still dominated by China and Japan is looking for alternative supplies of this critical metal.)

The Panasqueira mine started operation in 1896. The First World War was a boost to tungsten demand (for bullets and shells) but then the price fell in the 1920s. It was not until 1934 that prices picked up again.

The ITIA does not mention why, but basically China was then (as now) the primary source of the metal and gradually those mines were overrun as Japan first seized Manchuria and then, from 1937, extended the war to the rest of China. Even the mines still in what was known as Free China were cut off by Japanese blockade of Chinese ports.

That factor made the tungsten mines of Portugal and Spain critical to both sides.

The miners in the two countries made huge profits as the British outbid the Germans for the valuable tungsten.

Eventually, the US sealed the issue: it threatened to cut off all oil to Spain if Madrid sold any more tungsten to the Nazis.

Plymouth Minerals is running with the flow of interest back into Spanish tungsten.

The AIM-listed W Resources has just made its first tungsten shipment from the tailings of the La Parrilla mine, which was worked between 1954 and 1986, while two Toronto-listed juniors are in advanced exploration at the old Covas tungsten mine (where in 1980 Union Carbide did drilling that showed a considerable resource).

This is just one example of the potential that remains in Europe.

France, too, was once a significant metals producer but exploration has almost dried up.

An Australian company is looking for zinc in Italy, Albania has potentially rich pickings of chromium and Estonia has known deposits of rare earths.

And, be honest, after a hard day's drilling where would you rather be: 40km from Barcelona or 20km from Ouagadougou?

And one other point: Europe is very conscious of its vulnerability to disruption of supply of vital metals and the European Commission is looking to the continent producing more of those.