

## **Mining Brighter Prospects – Sunday Business Post**

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Is there a more interesting or less understood industry in Ireland than mining? Successful, 100% export, full employment yet full of broken dreams and promises. The dreams of the founders who believe that every hole they drill will hit. Investors who back the venture expect the founders to turn the dreams into promises. For the few there are great returns, for most only failure. That is the nature of mining – time consuming, high risk, high technology exploration followed by capital intensive, technology intensive mine development. What can take decades to find and years to develop may only last for 20 years. Sixty years ago Ireland had no mining industry and seemingly no prospects but a few maverick pioneers led by Pat Hughes, a returned emigrant found zinc in Galway. This led to a boom in exploration and further discoveries. Today there are 3 prospective discoveries.

### **Zinc**

Zinc is one of the most widely used metals in the world. Every car, fridge, washing machine and galvanised roof uses zinc. It is also an essential ingredient in the wellbeing and development of the human body. World demand is growing at 4% a year, mainly driven by the BRIC economies. Prices which have languished for 30 years, have risen sharply and are expected to stay strong as demand outstrips supply. Ireland is in a very strong position to benefit from the sound fundamentals.

From the discovery of the Tynagh mine near Loughrea in the early 1960s to the present when all of the world's leading zinc miners are actively exploring, Ireland has proven to be the most prospective country in the world in which to discover zinc. A wide band of limestone stretches from the Northeast around Dundalk through the midlands down to Clare/Limerick and Kerry. On the borders of this band some of the biggest and best zinc mines have been found.

Tara, in Navan, which is owned by *Boliden*, which has been producing for 35 years, was for a long time the largest zinc mine in the world and is now the 6<sup>th</sup> largest. Lisheen, in Tipperary is the 12<sup>th</sup> largest zinc mine. In their day, the Tynagh mine in Galway and the Silvermines mine, in Tipperary, were among Europe's biggest. There is every chance of the trend continuing with 3 significant zinc discoveries currently being explored – the Limerick Pallas Green discovery owned by *Xstrata*, where 28 million tonnes have so far been outlined, the Stonepark discovery beside Pallas Green, owned by *Connemara* and *Teck*, where upwards of 5 million tonnes are outlined and the earlier stage Kilbricken discovery of *Lundin Mining* in Clare. More than 30 companies are actively exploring in Ireland including a cluster of Irish exploration companies. Numerous large publicly listed mining companies also owe their origins to Irish zinc: *Northgate*, the original Tara and *Kenmare* to name but a few. Irishmen who learned their trade in Irish mining have founded dozens of exploration companies in Canada, Australia and the UK including, *Connemara*, *Minco*, *Alba*, *Ormonde* and *Rathdowney*.

Hope springs eternal in the hearts of Irish explorers and investors in exploration companies. The early investors in *Tara* and *Northgate* saw huge returns. Recently *Minco* sold their Pallas Green interests for \$20m while earlier explorers such as *Ivernia* with a stake in Lisheen, *Conroy/Arcon* owning Galmoy and *Belmore* in Clare sold out to multinationals. Currently Irish zinc explorers are very active. *Connemara* is busy with *Teck* in Limerick and Oldcastle. *IMC* is drilling in Tipperary. *Rathdowney*, Canadian listed but Irish, has ground in the Midlands recently joint ventured with the giant *Antofagasta*, while *Alba* has a Limerick joint venture with *Teck*. *Unicorn* and *Midas* are two other private Irish companies with licences. All of the explorers are looking for the same thing – a big high grade deposit. The *Xstrata* discovery in Limerick is at the feasibility stage for a 6,000 tonne a day world class mine costing \$500m and employing hundreds. Commercial discoveries are needed. Lisheen has

only 2/3 years left and the life of Tara is less than 10 years but the prospects are good.

## **Gold**

Ireland is an emerging gold exploration province. At present only the small Galantas mine in Omagh is operating but hopes are high that *Dalradian* will commercialise their discovery at Currinahault in Tyrone. In the mid 1790s gold was discovered in Avoca. A gold rush ensued. The British sent a detachment to control the situation but the soldiers joined the panning. It was a short lived boom but since then numerous unsuccessful attempts have been made to find the mother lode. It is said that Charles Stuart Parnell panned the river behind his house, Avonmore, in the Wicklow hills, until he had enough gold to make a wedding ring for Kitty O'Shea. In recent years a Garda in Naas using a metal detector found in the Wicklow hills some large beautiful nuggets. Despite spending millions and using the best technology a commercial discovery has never been made. *Connemara*, and its predecessors, have been working in Wicklow/Wexford for 25 years. Excellent grades have been found in numerous areas but it has been impossible to tie the various discoveries into one viable deposit. The arrival of Dale Hendrick promises a renaissance. This experienced Canadian gold prospector brings cutting edge exploration technology. He is exploring his own ground as well as joint venturing with *Connemara*. A recent \$500,000 aeromagnetic survey has thrown up interesting leads which will be explored later this year.

The most immediate prospect for a significant gold mine is Currinahault in Co Tyrone, operated by *Dalradian*, a Toronto listed company run by an Irishman. Gold grades of over half an ounce per tonne suggest that a significant gold mine could evolve. For years *Conroy Gold and Diamonds* has been exploring for gold in Monaghan/Fermanagh for where a large low grade deposit has been outlined. *IMC*, an Irish company and *TNR Gold*, a Vancouver company, hold ground in

Wicklow/Wexford. Both companies are searching for the source of the 1796 alluvial gold discoveries.

### **Other Minerals**

Coal, barite and, recently lithium, are being hunted. There are known deposits of anthracite in the midlands but the seams are too narrow. A new company, *Terra Energy*, holds most of the ground over the known deposits.

Barite is a little known mineral used in oil drilling to control the pressure in oil wells – the drilling mud. Ireland has known deposits of barite generally in or around known zinc/lead deposits. A small barite mine in West Cork has recently re-opened.

Lithium is a mineral in scare supply. It is used in long life batteries. A small deposit was discovered some years ago in the Wicklow hills by a predecessor to *Minco*. Now the International Lithium Corp of Canada holds eight licences. In recent weeks a large Chinese company has agreed a joint venture to prospect the area. This reflects the demand in China for lithium.

A few intrepid prospectors believe that Ireland may even hold more exotic deposits, including platinum and diamonds. Platinum traces have been found on the Cooley peninsula and in the Sperrins, while an English company has taken out licences to prospect for diamonds. Irish geology does not easily lend itself to diamond deposits, yet in the 19<sup>th</sup> century a beautiful white diamond was found in a river in Kerry; it was presented to Queen Victoria.

### **Mining in Ireland**

Does Ireland need a Mining Industry? Some have suggested that Ireland is a post-industrial society which should rely on a knowledge economy. We are far from it. One of the major benefits of mining is the economic multiplier. That means every euro of mine earnings is multiplied by a factor in local spending. The multiplier can be as high as nine in remote areas. Mining output is virtually 100 per cent export and will remain so until there is cheap domestic energy available to turn the ore into metal and then into products.

It is said that mining is environmentally difficult. It can be, but it shouldn't be. Best practise ensures that a modern mine should not damage the environment. Yes, it changes it but not for the worst. It is interesting to note that Europe is seeing a renaissance in gold mining. Where? In Scandinavia where modern controls ensure that there are no pollutants released into the environment.

Should government take a larger share in mining revenue? A major reason for Irish exploration success is a good mining policy. Terms are clear, title is assured and state bureaucracy limited. Mining profits are taxed at twice the level of industry corporate tax – 25 per cent. It was estimated some time ago that up to 90 per cent of all mining revenue was spent in Ireland in the form of wages, supplies, taxes and interest.

### **Future**

The future of Irish mining depends on the amount of exploration being done. The more holes you drill the better the prospects of a discovery. Exploration funding is high risk and volatile. It needs high metal prices, good geology and sound government policies. Ireland has the geology and the policies. Metal prices have been high for some time so exploration has blossomed. The immediate future looks fragile as the world economy teeters along a recessionary path but the fundamentals mean that the long term demand for zinc, barite, lithium and gold are good.

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