

**IS THERE A EUROPEAN
MINING RENAISSANCE?**

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Christopher Ecclestone – Mining Strategist

HALLGARTEN & COMPANY

CURRENT STATE OF PLAY

- Mining never went away in Europe, it just retreated massively since the 1980s (and before)
- Ironically, the most resilient mining sub-space was thermal coal, which is now looking like it has the weakest long-term outlook

IS EUROPEAN MINING BACK FROM THE DEAD?

- In short, yes, but this is nuanced
- The renaissance may be more of a case that the mind is willing and the body is weak.
- Politicians talk about the criticality issue and mention (*sotto voce*) China's dominance of many key technology metals but are they prepared to put their money where their mouth is?
- We have the paradox of local populations wanting mines and governments and city folks being opposed, while in some areas the desire comes from on high without too much local support
- The EV boom provokes the question as to whether it's all good as long as the mining is in someone else's backyard

SOME HISTORY

- Mining of base and specialty metals has taken a path of steep descent since the 1980s in Europe
- It is maybe no coincidence that this decline has paralleled the rise of the EU
- Many former Eastern European, and poorer Mediterranean economies found that EU subsidies for projects and infrastructure were sexier job creation tools than mines
- Many Eastern European mines were state-owned and unprofitable or strongly polluting
- Spain, for example, let mining go to the wall in the mid-1980s as other sectors were more enticing
- Mining of base and specialty metals were allowed to decline since WW2 in Britain, France and Germany

CRITICALITY & ONSHORING

12th March 2018 - Member State Ministers in the Competitiveness Council adopted the text of Council Conclusions in response to the Commission Communication on a renewed EU Industrial Policy Strategy.

The document:

- ✓ Underlines the importance of strengthening the industrial base
- ✓ Calls on the Commission to present a structured and comprehensive EU industrial strategy, at the latest by the beginning of the next EU institutional cycle (2019)
- ✓ Underlines that strategic objectives need to be established and constantly monitored, in order to effectively implement a comprehensive EU industrial policy
- ✓ Urges all actors involved to prepare an adequate answer how to handle the industrial strategies of third countries, facilitating the integration of European companies in global value chains, also in a long-term competitiveness perspective

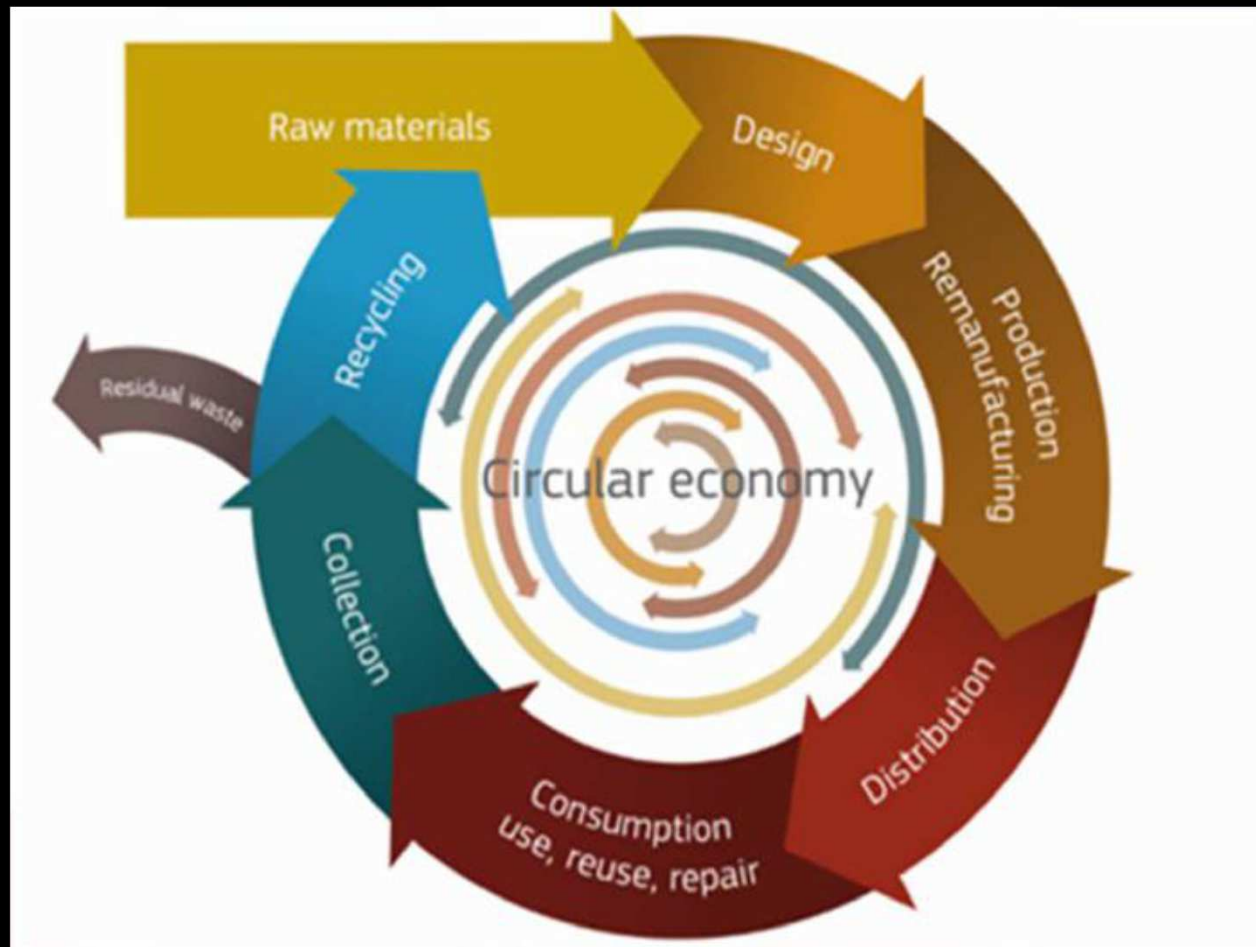
But with a new Commission: Increased focus on industrial value chains and European production

CRITICALITY RANKINGS

Critical Minerals	US (2019)	EU (2017)	Japan
Antimony	X	X	X
Arsenic	X		
Barytes	X	X	
Bauxite	X		
Beryllium	X	X	
Bismuth	X	X	
Borate		X	
Cesium	X		
Chromium	X		X
Cobalt	X	X	X
Coking coal	X	X	
Fluorspar	X	X	
Gallium	X	X	X
Germanium	X	X	X
Graphite	X	X	X
Hafnium	X	X	
Helium	X	X	
Indium	X	X	X
Lithium	X		X

Critical Minerals	US (2019)	EU (2017)	Japan
Magnesium	X	X	X
Manganese	X		X
Natural graphite		X	
Natural rubber		X	
Niobium	X	X	X
Phosphate rock/Phosphorus		X	X
Platinum-group elements	X	X	X
Potash	X		
Rare Earth Elements	X	X	X
Rhenium	X		X
Rubidium	X		
Scandium	X	X	
Silicon metal		X	
Strontium	X		
Tantalum	X	X	X
Tellurium	X		
Tin	X		
Titanium	X		X
Tungsten	X	X	X
Uranium	X		
Vanadium	X	X	X
Zirconium	X		X

THE CIRCULAR ECONOMY



THE CIRCULAR ECONOMY

- Buzzwords help to get many people thinking in the same direction but they may oversimplify things
- This is particularly the case with battery metals and Rare Earths for the EV “revolution”
- Recycling is a worthy goal when there is enough to original material to recycle
- Recycling relies on more than just the power of positive thinking
- Original production must be “onshore” for a true circular economy or else one is using other “outside” economies as quarries
- The circular economy can end up with you chasing your own tail!

STATE OF PLAY

- The Scandinavian region was the part of Europe that never really lost its mining interests
- Poland also is in this category but much lower beneath the radar. Hardly any foreign miners drive the activity there
- The Balkans have (selectively) become a hot location with Serbia, Northern Macedonia and Bulgaria receiving much attention
- Romania has lost focus of explorers/developers due to past problems (e.g. Rosia Montana)
- Greece is regarded as very problematical after its poor treatment of Eldorado Gold. The country is regarded as a classic case of “spoilt by EU money”
- Another country in the same category is Slovakia where a flurry of activity in the highly prospective Carpathians last decade which has been scared away by NIMBYism

STATE OF PLAY (II)

- Germany has attracted some foreign interest to its Harz mountains for primarily Lithium, but Tin and even some base metals have also generated interest. None of this has led to any actual production.
- France is now supposed to be “mining-friendly” but seeing is believing. Few explorers or developers want to test the theory.
- Italy becalmed
- Portugal is a hive of activity but only Tungsten seems to excite foreign interest (as well it should). The old Roman gold workings are a constant temptation but never lead to actual production
- Likewise Spain is a mineral treasure house. It is seeing revived interest, and even some activity, across a swathe of metals

FUTUROLOGY

- Mining is reactivating partly as a response to tighter EU budgets meaning largesse is being squeezed
- Some countries are realising that NIMBYism is costing them dearly in terms of jobs, economic activity and exports. The growing realisation should force the likes of Greece, Italy, Romania and Slovakia into more mining-friendly stances
- Brexit will increase the pressure as EU budget shortfalls will result in shrinkage of disbursements to “less-developed” countries in the bloc.
- Brexit should also focus UK attention on its own dependence on minerals from far afield particularly critical metals/minerals
- There will be increasing focus on, and establishment of, non-Chinese battery metal supply chains with Germans, South Koreans, and Japanese companies leading the way