



CONFLICT AND OPPORTUNITY: Chemical Management, the Circular Economy & Precious Metals

Welcome by Dr. Heinz-Günter Schenzel, EPMF President

5 December 2018, Brussels

Dear Ladies and Gentlemen, dear Members of the European Commission,
dear EU Institutional Representatives, dear Representatives from ECHA,
dear Speakers, dear everybody who is interested what we are doing and working on.

I am delighted to welcome you to our event „Conflict and opportunity“ under the subject of Chemical Management and Circular Economy. Precious Metals are a perfect example for circular economy in a certain stage.

Precious Metals are our business, like Gold and Silver, that is what **Goldie** and **Silvester** are staying for and that is why we want to use these characters today and in future for our events and ambition.

Gold and Silver fascinates us already for 5000 years, when Precious Metals at first Gold and then Silver were refined to make jewellery and decorative accessories for Tut Anch Amun, Nofrethete and Kleopatra for example. Jewellery is today a very important Market for Gold and Silver.

The second application was Minting of Gold Coins for Investment or as Currency. 600 hundred years BC King Kroisos of Lydien minted the first Gold coinage as currency, which changed trading, finance and social life in principle and build the basis for the development of all economies of the world. Today Gold and Silver are used for investments - private and institutional.

The yearly Gold demand is about 4500 to.

Two third of the yearly Gold demand goes into Jewellery and Investments. One third goes into industrial, electrical and electronic applications, like contacts, switches, computer and mobile phones, where you need constant and stable functionality. So this is a third and very important application where there is almost no alternative.

For Silver, the second well known Precious Metal, the yearly demand is about 35 000 to.

50 % of the demand goes into Jewellery, tableware and and coins and bars for investment like Gold. But the other half is for industrial and electrical applications, where good conductivity is needed, even more important to save electricity and for the mobility of the future. Silver is an industrial used and very important metal. Other metals for example like copper cannot match the needs.

Of course the Precious Metals Gold and Silver are well known and very much needed, but the third Precious Metal Platinum, where our **Miss Platina** stands for, is needed very much as well and is part of a group of additional Precious Metals, the so called Platinum Group Metals (PGM) like Platinum, Palladium, Rhodium, Ruthenium and Iridium, which all of them have technical applications and are absolutely needed in all our technical industries.

For example Platinum, the yearly demand is about 250 to.





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More than two third goes into catalytic applications - autocatalysts and chemical catalysts - and industrial applications. Less than one third goes into Jewellery. Platinum is for us an industrial metal with excellent catalytic properties and high thermal stability, where there is again no alternative except by some other PGMs.

Where do the Metals come from ? Of course they are coming from mining as almost all other metals. Mining is the one source from where we get the Precious Metals, but this it not enough to fulfill the mentioned demands. Therefore one third of the demand comes already from recycling of used products, scraps and residues. The collection is also an important point. The efforts for recycling have to be increased and I think this is completely inline with circular economy.

What are the challenges ? At first we are talking here about a group of (inclusive Rhenium) 8 different Precious Metals with a lot lot of different substances based on these metals concerning the processing and usage: from refining, recycling, production and final usage; these are nearly 80 substances.

But that is not all. As recycling is an important part of the business to fulfill the yearly demand we have also to handle the scraps, side streams and UVCBS accordingly, in addition about 20 different materials.

Based on these circumstances and the requirements from REACH legislation, we in 2007 established the Precious Metals and Rhenium Consortium with 40 members to generate a joint Task Force - a joint venture - to jointly fulfill the requirements of the REACH-Regulation until 2018.

This is a really young organization compared with the Nickel- or Copper-Associations. We had to start from zero with 100 materials, no experience and no data. And what does REACH legislation say = no data no market. And what did we achieve = we have registered all our Substances and UVCB`s and are already in the next phases; Chemical Management will keep us busy.

As Registration was finished, we formed this year the new European Precious Metal Federation (EPMF) and all our members from the consortium transferred into the new organization and again with the same attitude, to generate a joint Task Force - a joint venture - to jointly and together work on chemical management and the challenges for our industry.

As only 2 third of the demand for Precious Metals can be covered by mining, we need intensive recycling efforts. Without recycling we will never match the demand of the maket. Already today one third of the demand comes from the recycling of high and low grade materials.

We have processes in place for recycling of all the materials which are used and they were always accepted.

The challenges for the process we have in place are now for example the Lead-process, where we need Lead as collecting material and separating material for the Precious Metals especially the PGMs. Lead is on the candidate list for SVHC, so under suspicion and therefore our process is under risk. Hugo Waeterschoot will go therefore more into detail during his presentation. For us it is an internal process material, where of course occupational health requirements are absolutely necessary. Lead stays in the internal recycling process and should be therefore for us no issue concerning Registration and Evaluation under REACH.

The other challenge is the usage and processing of Silver. There is the risk that Silver can get categorized as **cat 1b reprotox**. This would result in no further enduser applications like for Tableware, Jewellery and also industrial.





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These are two examples which puzzle us very much and can impact the future usage and our recycling processes. Remember one third of the Precious Metal demand comes from recycling.

We want in future under the chemical regulation, use chemical management tools like RMOa to secure our well established recycling processes to ensure the supply of the needed Precious Metals. The concepts of circular economy are in line with our recycling technologies and our business models = **our ambition**.

So why are we inviting you here today ?

We want to tell you what the Precious Metals are and what they are needed for.

Recycling secures one third of the demand and this is in line with the ambition of circular economy

What is called Waste in the context of PM containing materials we see as resources.

Therefore there has to be found a certain way of Harmonization between REACh and Waste Regulation, what would also be in line with the concepts of circular economy and opens up a lot of opportunities.

What do we expect ?

We expect from the speakers and discussion panel for the audience:

That they make you understand what are our challenges in Precious Metals and what are the possible solutions.

That they make you understand that we with our recycling technologies are in principle in line with the ambition of circular economy.

That you recognize us and remember us for the next discussions, meetings and events and that it gets into a network developing opportunities.

So let us start into the event !

I wish you all a fascinating afternoon !

Brussels, 05.12.2018, Dr. Heinz-Günter Schenzel

