

## SPEAKERS DEBATE

**Friedbert Pflüger, Director of the European Cluster for Climate, Energy and Resource Security (EUCERS) at the University of Boun, Founding Partner of Strategic Minds Company GmbH**

First of all, I would like to ask you on the panel whether someone wants to reply or contradict or especially support something that somebody else on the panel said. Anyone? Please, Christophe, firstly.

**Christophe Poinssot, directeur général délégué et directeur scientifique du Bureau de recherches géologiques et minières (BRGM)**

Thank you very much. I would just like to go back to what you mentioned regarding what I call the responsible mining activities, which is very important for the future.

I want to specifically stress that, first, we need to invest in terms of research and development to define what is going to be responsible mining. How do we design a mine with a very low environmental footprint, very low water consumption, very low waste production, and so on? You can decline on every type of environmental indicator.

We already have some clues. We already have some direction to move forward, but we still need to invest in this direction.

Secondly, the social aspect is very important and, certainly, everything that we are doing right now, at least in France regarding the development of new mines, either in our country or abroad, is within this concept and also within the aim of relocating a significant part of the added value in the country, to help the country to develop this type of mining activity instead of dirty mining.

Therefore, I fully agree with what you mentioned. It is a real critical point to address and succeed in if we want to develop this new mining activity.

**Friedbert Pflüger**

Jonathan?

**Jonathan Cordero, Responsable du développement de l'entreprise chez Eurasian Resources Group (ERG)**

I would like to make one thing very clear. The materials that we are talking about will not come from G7 countries. They will come from different countries and, assuming that this will be the



case, is also very dangerous because we lose time in taking action and putting attention where it is needed.

The most prospective projects are, for example, in the case of copper cobalt in the copper belt, that is Zambia, the Democratic Republic of Congo up to Angola. The next generation of new projects will probably be in the orogenic belt – that is Afghanistan, Pakistan and Iraq. Not on the radar for everyone.

Now, we are talking about Saudi Arabia, the Nubian Shield, the Arabic Shield. This is where we need to focus our attention. It is very dangerous if we believe that we can get away with putting policies in place and developing and subsidizing projects in developed countries. We need to put our attention to these types of countries, and I totally agree that we need to do this in a sustainable manner. However, we need to take the responsibility in solving the problems there and not here.

### **Friedbert Pflüger**

Thank you. Philippe?

### **Philippe Chalmin, fondateur du Cercle Cyclope, professeur émérite à Paris-Dauphine**

Well, I absolutely agree with what Nicolas said about the necessity to take care of environmental and social problems. However, you also have to, unfortunately, take care of political problems. Remember one thing which is valid for fossil fuels, but also and historically far more for metal mining. This is what I call the commodity curse. Remember that a country which bases its development only on mining is fairly often an unstable and corrupt one.

Let us put it frankly. If there is a country which should be at the top of African development, it should be the Democratic Republic of Congo. Because of copper, cobalt, coltan and diamonds, the DRC is what it is right now.

Unfortunately, we have to live with that and that explains why there are very few countries in the world which have really managed that commodity curse. Norway is the case, Chile for a certain time was one – now they are thinking of nationalizing their resources, which is probably not a good solution – Botswana was for diamonds. However, there are very few cases of countries who have managed to avoid the commodity curse.

This is something which we have to take into account, and the fact that the only good forecast I could make on all those metals is that tomorrow prices will be different to today. The only thing I am sure of is the volatility of prices and, on that volatility, you must manage to build long-term strategies.

Good luck.