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“We are no longer dependent on China”



Michael Wurmser, CEO of Norge Mining, at the Ludwig Erhard Summit 2022 at Tegernsee. (Photo: WMG)

Norge Mining explores and mines rare raw materials in Europe. The company is mainly active in Norway. Company boss Michael Wurmser explains the new sustainable funding approach.

Michael Wurmser is one of the founders of Norge Mining. The name of the Norwegian-British company could come up more often in the future, because it discovered the world's largest deposit of phosphate ore rock in south-west Norway. Above all, batteries and storage capacities for the mobility and energy transition as well as fertilizers can be produced with it. Does this give Europe the chance to become independent of Chinese, Russian or African suppliers?

Mr. Wurmser, first the pandemic has us under control, now the terrible war in Ukraine, an expensive super cycle for raw materials and supply chains that are becoming more and more porous - so how is it for a raw materials entrepreneur like you?

Shocked and saddened by the sad circumstances in the middle of Europe, but nevertheless confident, because the change of times propagated by Federal Chancellor Olaf Scholz in view of the terrible war in Ukraine underlines that our politics and economy cannot go on like this and that it is now about freedom and sovereignty of Europe. And this is where mining in Europe suddenly begins to play a strategically fundamental role again, in order to make itself independent of questionable and politically problematic suppliers of energy and raw materials.

What change of mind led to this?

Most recently, the corona pandemic, which has led to massive supply chain disruptions, and now the terrible war in Ukraine, which relentlessly shows us the feet of clay on which our economy stands, which is urgently dependent on raw materials of all kinds, especially critical raw materials. The boomerang of decades of optimization and cost efficiency is now coming back painfully. If, like the EU, I have to import 65 percent of my raw materials from countries like

China or Russia today, I now have a big problem – economically, strategically and politically. The trade conflict, which has been brewing between the USA and China for a long time, only appears as a sideshow due to the new circumstances of a war in the middle of Europe.

Which?

The sudden disappearance of the world's largest wheat export pair, Ukraine/Russia, will have a massive impact on global nutrition. Both countries account for more than 30 percent of the basic food supply. The failure of these main suppliers of grain, wheat and corn threatens to trigger unrest in some parts of the world. The Arab Spring, and in particular the Egyptian revolution in 2011, was preceded by a major drought in Eurasia and a corresponding rise in bread prices. If you consider that Russia and Ukraine will be removed from the supplier lists for all raw materials and goods in the coming years, all this will have a big impact on the demand for fertilizers and thus also on the demand for phosphate to increase crop yields elsewhere increase.

What does this have to do with Norge Mining?

We are currently seeing that a whole series of key raw materials such as phosphate, titanium and vanadium, which we urgently need here, are becoming scarce, be it due to the high demand and the current geopolitical general weather situation, for example due to the war due to Russia's failure to supply raw materials or the artificial shortage of raw materials commodity exports by China. And this is where we can step in with our large deposits, known as critical raw materials, be it to supply the steel industry with urgently needed raw materials, to advance the energy and mobility transition or to help secure world food supplies.

What specifically did you discover in Norway during your drilling?

We have discovered so-called "critical raw materials". This designation is actually a classification of the EU. She means those raw materials that are of great economic and strategic importance for the European economy and its industries, but are associated with a high supply risk. These materials are not only critical for important industrial sectors and future technical applications, but also for the sustainable functioning of the European economy as a whole. We can mine critical raw materials locally in southern Norway for at least the next 75 years without running out. With these resources in Norway, Europe and the West can secure complete independence from at least three raw materials and are no longer dependent on third countries such as Russia, Morocco, Kazakhstan, but especially China. Being independent of raw materials or, as it is called, "onshoring" of raw materials reduces the risk of supply chain disruptions, but also means being independent of political reprisals.

What are these critical raw materials from your deposit used for?

It's about phosphate, titanium and vanadium. On the one hand, phosphate is a basic component of the fertilizer industry and thus part of the food security and supply of the world population. Phosphate cannot be substituted and global reserves are limited. Man but it also needs to replace nitrogen-based fertilizers, which otherwise emit nitrogen oxides and accelerate climate change. Vanadium is gaining enormous importance as a raw material for electricity storage of renewable forms of energy. It can replace traditional lithium-ion nickel batteries that contain toxic heavy metals and are difficult to recycle. They are part of a chain of irresponsible consumption. Natural phosphate fertilizers and long-life vanadium batteries play a significant part in solving this global problem. Internationally, vanadium redox flow batteries will be the answer to storing vast amounts of renewable energy to leave harmful carbon dependency behind. However, phosphate is also part of the new lithium iron phosphate battery (LFP battery), which is already being installed at Tesla, Volkswagen and other car manufacturers. Titanium is very strong and light. It has become indispensable in the aerospace industry and in the defense

industry. So far, most of these raw materials have come from Russia, China or North Africa. We are currently experiencing how shaky the supply is. The largest titanium producer is Russia with 40 percent world market share. The US company Boeing, for example, completely canceled its titanium purchases from the Russian supplier VSMPO-Avisma after Russia invaded Ukraine and is now facing a problem. That is why these are critical raw materials. Incidentally, these are already available to us at a shallow depth. which are already installed at Tesla, Volkswagen and other car manufacturers. Titanium is very strong and light. It has become indispensable in the aerospace industry and in the defense industry. So far, most of these raw materials have come from Russia, China or North Africa. We are currently experiencing how shaky the supply is. The largest titanium producer is Russia with 40 percent world market share. The US company Boeing, for example, completely canceled its titanium purchases from the Russian supplier VSMPO-Avisma after Russia invaded Ukraine and is now facing a problem. That is why these are critical raw materials. Incidentally, these are already available to us at a shallow depth. which are already installed at Tesla, Volkswagen and other car manufacturers. Titanium is very strong and light. It has become indispensable in the aerospace industry and in the defense industry. So far, most of these raw materials have come from Russia, China or North Africa. We are currently experiencing how shaky the supply is. The largest titanium producer is Russia with 40 percent world market share. The US company Boeing, for example, completely canceled its titanium purchases from the Russian supplier VSMPO-Avisma after Russia invaded Ukraine and is now facing a problem. That is why these are critical raw materials. Incidentally, these are already available to us at a shallow depth. It has become indispensable in the aerospace industry and in the defense industry. So far, most of these raw materials have come from Russia, China or North Africa. We are currently experiencing how shaky the supply is. The largest titanium producer is Russia with 40 percent world market share. The US company Boeing, for example, completely canceled its titanium purchases from the Russian supplier VSMPO-Avisma after Russia invaded Ukraine and is now facing a problem. That is why these are critical raw materials. Incidentally, these are already available to us at a shallow depth. The largest titanium producer is Russia with 40 percent world market share. The US company Boeing, for example, completely canceled its titanium purchases from the Russian supplier VSMPO-Avisma after Russia invaded Ukraine and is now facing a problem. That is why these are critical raw materials. Incidentally, these are already available to us at a shallow depth. The largest titanium producer is Russia with 40 percent world market share. The US company Boeing, for example, completely canceled its titanium purchases from the Russian supplier VSMPO-Avisma after Russia invaded Ukraine and is now facing a problem. That is why these are critical raw materials. Incidentally, these are already available to us at a shallow depth. The largest titanium producer is Russia with 40 percent world market share. The US company Boeing, for example, completely canceled its titanium purchases from the Russian supplier VSMPO-Avisma after Russia invaded Ukraine and is now facing a problem. That is why these are critical raw materials. Incidentally, these are already available to us at a shallow depth.

... and leave behind a crater landscape contaminated with chemicals, which is uninhabitable, in the middle of the nature reserves of Norway.

Absolutely no way. We only use renewable energies from water and wind power to power our company. In addition, these minerals can be extracted completely from the ore rock and separated from one another without chemical additives. After the extraction of the raw material,

we plan to renaturate the respective mining area. Excess overburden will be sold to the Netherlands, Denmark or Scotland, among others, to be used to fill up their coasts, which are threatened by rising sea levels. Sustainability is at the heart of everything we do. After all, it would be completely insane to extract raw materials that are supposed to help us combat climate change and then do the opposite when extracting them. Mining that is gentle and environmentally friendly from all points of view is an absolute requirement for us. We respect and spare all protected areas and are in close contact with local environmental protection groups. There is enough space and there is absolutely no reason to even think about getting close to these protected areas or destroying them unnecessarily.

Usually not everyone sees it that way. What happens to the people who live there?

We meet regularly with the residents in the communities within our already sparsely populated license area. We are in close contact with local councils, and with local suppliers, landowners and local farmers. We will maintain this open-door policy for all stakeholder groups in the future, both in the case of new developments and in the further objectives of our projects. For landowners on whose territory we mine, we have to set aside 2.5 percent of our turnover as compensation, which is also regulated and stipulated in Norway's Minerals Act. That should be good business for everyone.

Speaking of which, who are your investors?

We are fully privately funded, debt free and therefore fully independent. As a Norwegian-British company with a majority of Swiss shareholders, our company's shareholder base currently consists exclusively of European investors from Germany, Austria, Norway and Great Britain.

Also in China?

We are clearly oriented towards Europe and the West. Local and national authorities in Norway, as well as the EU Commission, have our backs, stand behind us and assure us of full support at all levels. Communication with the EU Commission has intensified and accelerated since the Russian attack on Ukraine. Europe now wants independence from these raw materials, sooner rather than later. Norway has already made advance payments in this regard and has geographically postponed the planned construction of a motorway from Denmark to Norway - an infrastructure project and a cooperation between Norway and the EU - in the section that runs through our zone so far that the route no longer crosses our area is running. But of course,

Your vision - when will the funding really start?

The Ukraine war changed everything. Before the war, we assumed that it could take another four or five years before funding was available. However, the EU is suddenly no longer going fast enough under the burden of the industries and economy, which are now building up powerful pressure. Therefore, I think that this period will be reduced. In the past three weeks, Ukraine and Russia, as the main suppliers of grain, phosphate (Phosagro), titanium, vanadium and other raw materials, have disappeared practically overnight. And unfortunately this is not a temporary situation either. This is a turning point of a long-term nature. The loss of main suppliers of important, critical raw materials will shape the industries for the next five to ten years and force them to look elsewhere. Many cards are reshuffled. The green transition will now accelerate even more. People want to get away from being dependent on fossil fuels, away from being dependent on gas. In any case, we will be on the market in time for the big battery boom and will

start at the very beginning of the value chain to make Europe more independent, more sovereign, more sustainable and ultimately climate-neutral. The local industries, above all the local car industry, will not be able to avoid connecting with raw material suppliers like our company. Think vertically! In any case, we will be on the market in time for the big battery boom and will start at the very beginning of the value chain to make Europe more independent, more sovereign, more sustainable and ultimately climate-neutral. The local industries, above all the local car industry, will not be able to avoid connecting with raw material suppliers like our company. Think vertically! In any case, we will be on the market in time for the big battery boom and will start at the very beginning of the value chain to make Europe more independent, more sovereign, more sustainable and ultimately climate-neutral. The local industries, above all the local car industry, will not be able to avoid connecting with raw material suppliers like our company. Think vertically!

The conversation was conducted by Oliver Stock.