EU's Sefcovic: Real risk that 'raw materials become the new oil'

European Commission Vice-President for Energy Union Maros Sefcovic. [EPA-EFE/OLIVIER HOSLET]

This article is part of our special report The global race for raw materials.

Europeans have to be “very vigilant” that today’s dependency on imported oil and gas is not replaced by dependency on lithium, cobalt, copper and other raw materials that industries need for the green transition, Maroš Šefčovič told EURACTIV.

“I really think that, when it comes to the issue of dependency, we could end up in a situation where raw materials become the new oil,” the European Commission vice-president warned in an exclusive interview.

Maroš Šefčovič is vice-president of the European Commission in charge of the energy union. He spoke to EURACTIV’s energy and environment editor, Frédéric Simon, at the end of EU Raw Materials Week 2018.

INTERVIEW HIGHLIGHTS:

- European Commission is looking at access to raw materials with increased scrutiny
- Discussions intensify with EU member states on how to develop mining activities inside Europe, re-opening old mines and opening new ones
- Initiatives on battery manufacturing are in the pipeline for the coming year, including standardisation and regulatory alignment
- Lithium refining is being promoted as part of a broader strategic push to develop an entire battery value-chain inside Europe
- New Africa-Europe Alliance to promote sustainable mining, with the aim to leverage up to €44 billion of investments into the region by 2020
- This means European companies should also be ready to pay taxes, and play a role in the local economy, to the benefit of African countries

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It’s been ten years now since the European Commission adopted its raw materials initiative, in a context of increased competition for natural resources, which saw metal prices triple between 2002 and 2008. Those worries were swept away by the financial crisis but now that the economy is back on track, do you see a risk that raw material prices will start rising again?

It’s already happening. And the strategy that we adopted ten years ago had three priorities which are still relevant today. The first is access to raw materials outside of Europe; the second is mining raw materials inside Europe in a sustainable way; and the third priority which is becoming even more important in the coming years, is how we can improve reuse and recycling.

All the focus now in the European Commission is to reduce dependency on fossil fuels. But we want to avoid trading our dependency on oil and gas with dependency on the precious metals and raw materials that we need for the green transition.

This is why we are looking at access to raw materials with increased scrutiny – because they are often used in the production of high-tech electronic devices. And we continue to update our list of so-called critical raw materials every three years. We had 14 raw materials on the list in 2011, 20 in 2014 and now we have 27 in 2017.

But I was also intrigued to see rubber now on the list because only natural rubber can be used for the manufacturing of tyres. And the problem is not the lack of access to this material but the cartel behaviour of the countries producing natural rubber. So there are different reasons why we put these 27 raw materials on the list.

In parallel, we are also pursuing our priorities on free trade agreements, where we always have a part related to access and free trade of raw materials. As you know, we are more assertive in the WTO, as we have demonstrated with China.

At the same time, we are talking much more intensely with our member states in order to better map out the kinds of raw materials that we have in Europe so we can exploit them in a sustainable way.

This includes permitting procedures, ensuring coherence between different regulations and networking among the member states to ensure resources are shared with other members of the European family. And that was the topic of a meeting we had this week with the members of the high-level raw materials group in Europe.

With growing digitalisation, renewable energies, electric cars, etc, would you say metals and minerals are becoming the new oil of the 21st century?

I really think that, when it comes to the issue of dependency, we could end up in a situation where raw materials become the new oil.

We have to be very vigilant that today's dependency on fossil fuels like oil and gas is not replaced by dependency on lithium, cobalt, copper and other raw materials that we need for the green transition, where Europe is leading the way.

And we are probably the first to notice that there might be some scarcity of the metals we need. As you know, we are working a lot on batteries and the discussions there focus a lot on cobalt, lithium, nickel and copper. To produce a 3-megawatt wind turbine, which is not the biggest (today there are 8-9 megawatt wind turbines), you need 335 tonnes of steel, 4.7 tonnes of copper, 1,200 tonnes of concrete, 3 tonnes of aluminium, 2 tonnes of rare earth elements as well as zinc. And for me, that is really illustrative of the volume of raw materials you need for the green transition.

On the positive side, there are new projects for production in Europe. Mines are opening or re-opening and there is prospection going on to open some new ones. And we have also identified a gap linked to Europe's refining capabilities for lithium.

We have very solid reserves of lithium in Portugal, in the Czech Republic and in the Nordic countries. But we do not have the refining ability. So even if we extract the lithium today, we have to send it to China for processing.

Is that what the European Commission means when it comes to the promotion of entire value chains in Europe? Or is lithium refining something that can be done so cheaply abroad that it wouldn't make sense economically?

We clearly have to cover this gap. Before Christmas, we will invite the main companies in Brussels to discuss how we can cover this gap.

It's only logical that we should have the whole value chain in Europe. And that is one of the missing links that we have to cover. We are ready to discuss not only the regulatory aspects of course but also financial assistance – be it under the Important Projects of Common European Interest (IPCEI) or under Public Private Partnerships with the European Investment Bank (EIB).

Because the demand for processed refined lithium will be quite big in Europe, so it makes sense to have lithium refining capacities here.

When we started the European Battery Alliance, we were five years behind Asia. And thanks to concerted efforts, we reduced that gap by two years. And I'm sure that if we continue at this pace, we will quickly catch up. In this dynamic process, we are discovering what we are missing. And clearly, refining is something that we need to take care of.

Does it make sense economically to develop mining activity in Europe when labour costs, social and environmental standards are higher than in China or Africa? Or is it something that has to be done because it's strategic?

There are several aspects. There are between 30 million people in Europe employed in jobs linked to extractive industries in Europe, so there is an important job creation and development aspect.

The second aspect, indeed, is that developing mining activities in Europe is of strategic importance.

Today, 50% of cobalt mines in the world are managed by China. And we see there is a strategic drive by China to have primary access to these precious metals and materials. Unfortunately, we don't have the best history in dealing with access to these mines once they're under Chinese control. This is why we launched these WTO cases in 2012 and 2014 on which we received a favourable ruling. A third case is still pending and we also think it will be ruled in our favour.

But we lost some time in the process because we wanted to be on a legally sound basis. And in the meantime, China further consolidated its position. So I think we have to do a strategic push for that – to make sure that countries have rules in place so that mining is done in a sustainable way.

The same applies to Europe of course. When I talk to millennials, they want clean cars and they want the full story. They want a clear understanding that low-carbon renewable energy was used for the production of the car, that the raw materials were extracted in a sustainable way and that the batteries and everything that is in the car will be recycled afterwards. All of this is important for us as well.

This is why we are also looking at Africa. We want to use the new drive for a new EU-Africa partnership to promote sustainable mining and establish fair trade relations when it comes to raw materials.

Can Europe play on an equal footing with China in places like the Democratic Republic of Congo?

We first have to realise that 50% of Africa's exports to Europe are raw materials. In most cases, our companies respect labour codes and other rules of sustainability, to make sure supplies to Europe are in accordance with our values. Companies like Umicore have shown us that this is possible.

But of course, the Congo is a challenge. This is why we diversify supplies and look for all the opportunities we have in Europe. And we want to develop trade relations with countries where these materials can be extracted in a sustainable way.

It's a very strategic discussion and I'm happy we are having it right now. We are progressing well but I'm also sure that this is a challenge that is going to stay high on the agenda in the future.

Can raw materials be one of the pillars of the proposed new 'Africa-Europe Alliance' that European Commission President Jean-Claude Juncker mentioned in his State of the Union speech earlier this year?

We want to treat Africa in a different way, not as a donor group of countries but as a partner which can change the reality on the ground.

You know, Africa is one of the continents which is the most affected by climate change. So they should be the first to develop electricity from microgrids and solar panels, benefitting from the experience we gained in Europe with the energy transition. They can develop new activities and economic models in Africa.

Of course, we very much insist on fairness and transparency when it comes to trade relations. And for European companies, it means they should be ready to pay taxes and play a role in the local economy to the benefit of African countries, bringing their know-how and investments in new energies.

That is something I believe will be more and more appealing for African countries. Because with Europeans you know what you get – a transparent approach, companies that pay taxes and take care of the environment.

And then, we also have €44 billion of investments ready for African countries under the Africa-Europe Alliance, focusing on projects that bring value to local communities and the wider African continent.

We want to use the experience we gained with the Juncker investment plan for Europe and use the same leveraging capacities of the European Investment Bank (EIB) and other investment banks in Africa. And we believe this €44bn can be mobilised by 2020. It's a lot of money, and we want to channel it in those strategic sectors that can change things on the ground.

Inside Europe, a lot of attention is also being placed on so-called "urban mining" and recycling. How much can realistically be expected from that in the short term?

Recycling and reuse definitely have to be part of this European green story – certainly when it comes to batteries and the circular economy.

There is an example that European company Umicore likes to quote a lot: If we were to collect all the smartphones currently in our drawers and recycle them, we could manufacture 4 million car batteries. That's the potential currently in Europe.

When it comes to batteries, we want to proceed quickly in three areas: The first is the batteries directive, which we can refit to put more emphasis on recycling and reuse. The directive is ten years old and we have to upgrade it. It's a review exercise that we want to do under the mandate of this European Commission.

The second thing is standardisation. We want to develop new standards for batteries, and we are currently working with CEN and CENELEC to change the standards in a way that reflects our European narrative of sustainable materials.

This includes also bi-directional software. We don't want batteries just to power the car, we want it also to be able to store energy and sell it to the electricity grid at peak times when the car is not driving. This vehicle-to-grid connection fits very much with our new electricity market design proposal which is currently being finalised in the Council and Parliament.

And the final stage is reuse. When batteries aren't good for cars anymore, they can still be good for smart homes, for industrial storage use, and recycling. And that is also something we want to propose under this mandate, before autumn 2019.

The last regulatory aspect is eco-design. We want to make sure that only the batteries which have super-high quality features and are compatible this philosophy are allowed on the European market. This is something we will present within a year, so hopefully, we can celebrate the second anniversary of the European Battery Alliance with a clear policy on those three important strands.

The recyclability of batteries is very much related to the design of a product. The InnoEnergy network of 260 innovation and industrial actors have very specific projects to push the battery alliance forward. And one of them is a clearinghouse which involves all actors upstream in the value chain to mutualise the costs on the design of batteries to make sure that, at the end of the lifetime of a product, second use of raw materials is made easier right from the start. That would make it much easier to disassemble the product.

How much support do you have from EU member states on the battery initiative?

There is intense political will to go for it. Both national governments and industrial players are pushing for that. And I think we have the regulatory power and the financial means to steer it in that direction.

Since we started the European Battery Alliance one year ago, the industry and private investors have accumulated €100 billion of ongoing or planned investments, which is really huge.

We are also working very creatively with state aid under the IPCEI mechanism. I was in Germany a few days ago and Peter Altmaier said he was ready to use €1 billion in the form of eligible state aid. And then we have the financial muscle with the EIB to finance these things.

So I think we have all the right elements step things up. A lot still needs to happen but I think we have all the right elements to do a catch-up with Asia. We were already able to take two years out of our five-year gap with Asia.

But a lot still needs to happen. Raw materials will be one of the key issues to be resolved to preserve our technological sovereignty.

When do you believe the gap with Asia can be closed?

Catching up will be quick – I hope that by the end of this decade we will be on par with Asia. And I believe we will actually be leading because we will go for high-quality. Once we have a first gigafactory to manufacture batteries in Europe, which should happen next year, then we expect between 80 to 100 new electric car models in the showrooms in Europe by the end of the next decade.

And once we develop acceptance with the consumers, and there is further development of infrastructure, their appetite for this new technology will grow and it will evolve very quickly. So I hope that by the end of the decade, we will be on a par mostly with China when it comes to the mass production of batteries.

And I have full trust that, when it comes to image, European carmakers will want to catch up with American image-makers. And by the end of this decade, Europe will have cars which are as “cool” as those we can see on the other side of the Atlantic.