

## Panel 5 - International Practices and Responsible Mining, Due Diligence

**Moderator – Dione Macedo, Geologia Responsável**

We know that the mineral sector is currently experiencing a period where legitimacy and public confidence are as valuable as the mineral resource itself. The concepts of traceability, which have been discussed at length previously, transparency, and responsible practices within due diligence mechanisms are not merely regulatory or market requirements; they are determining factors for the sustainability of this sector.

---

### Edward Bickham — World Gold Council

So, when we were first planning this session, there was an intention to have a presentation from the OECD to speak in detail about the responsibility guidance to all. Unfortunately, logistics prevented that, so we will not have the OECD guidance on what makes gold legitimate or legal. It does not always need to be absolutely formalised, as long as the people involved seek formalisation and seek to do the right thing. The due diligence guidance is primarily focused on conflict-affected and high-risk areas. And the genesis of that guidance was essentially in Central Africa and the Democratic Republic of Congo, where millions of people died in a conflict in which minerals played a key role. But it also addresses issues of severe human rights abuses and also the presence of organised crime.

Therefore, some of the things we have heard today about the situation in some areas would mean that, under the due diligence guidance, some of the production would need to be able to assert that it is being produced responsibly. The lack of formalisation and the inability of small-scale miners to comply with due diligence are complicating factors that exclude them from conventional refiners and the mainstream market.

One of the things we need to do when looking at formalisation and at various processes further *upstream* is how we can all collectively work to support the human intelligence requirements of *upstream* actions. Now, that sounds very easy when one is not doing it.

Therefore, the three things I am going to address today, what the Gold Council is doing, are:

1. to talk about some of the partnerships we are working on to support formalisation;
2. secondly, to talk about reform of the gold processing infrastructure as a pathway to improving legality and due diligence;

3. and thirdly, to reflect a little on the creation of responsible buyer networks. And I hope you will forgive me for not having mastered all the intricacies of the buying system in DTVMs in Brazil.

We will talk about the role of Central Banks.

In terms of partnerships, you will see a report here that we produced in 2022, which looks at the relationship between large-scale miners and small-scale miners. What we set out in that 2022 report was what a large-scale mining company could do to support the actions of small-scale miners. You may remember a book that talked about coming from Mars and Venus. Well, it is a bit like that with large-scale miners and small-scale miners. They do not automatically find common ground. Therefore, there are issues of trust building, stakeholder engagement that are at the heart of building successful relationships and partnerships.

But for a large-scale miner in many parts of the world now, one of the skills they need to have is the ability to work with small-scale miners, because often that is the main source of livelihood in the area around their operations. And if they want a peaceful relationship with those communities, understanding the dynamics around that is very important. And the report, across 25 different case studies, looked at what could be done through the provision of skills training for the QGC, providing support in geology, safety, processing, and indeed tenure, providing support in basic business and administrative skills. And community investment, contributing to supporting access to lending for small-scale miners, so that they are not immediately pushed into the informal sector.

In some countries, where the legal system varies from place to place, there are opportunities for large-scale miners to work within public systems, either by sub-contract, which is a system they have in Colombia, or through assignment of areas of their concessions that are not suitable for industrial mining, otherwise, they risk being sterilised because they are within a large-scale mining concession.

We are undertaking work with the World Bank in West Africa, initially in Ghana, where we are working with the government. They have a difficult relationship with small-scale miners. The country had a civil war in the first decade of the century, and much of the rebel activity was financed by miners. So, they have taken a very punitive approach. That punitive approach has not, in fact, worked. And so, within Ivory Coast, there are probably 35 to 40 tonnes of gold a year that are not produced, they just disappear.

Therefore, the World Bank and I have been working with them to establish small-scale miner models that serve as an example for others. I am working with large-scale miners to mentor responsible small-scale miners. We are also active in various countries with Planet Gold, helping them to build relationships with large-scale miners, and with the London Bullion Market Association (LBMA), which regulates the main international refiners, we are trying to find pathways by which they can increase the volume of material coming from responsible small-scale miners to those refiners, which requires support in areas like *due diligence*, support and assurance that people have been formalised and can be on the right side of the law.

Moving forward, let's talk about the post-conference. We have talked a lot over the last day and a half about Mercury. It is poisoning people, fish, water, soil, and air, and it is creating a legacy that, in many countries, will cost billions to clean up. Furthermore, it is deeply inefficient.

There are several other alternatives, and I know that the National Action Plan addresses those issues, but one of the alternatives is cyanidation, which can achieve up to 90% potential recovery. That does not mean we are advocating for lots of small-scale miners to use cyanide by the riverside, that would be a recipe for disaster. However, if it is possible to create centralised, well-regulated processing plants, cyanide becomes a viable option. And, in that process, you suddenly increase the amount of gold that can be recovered by over 100%. That generates a value set that creates many opportunities. Therefore, they are opportunities both as livelihoods, negative externalities, and also opportunities for the government.

One of the problems with formalisation, we generally know, is that when you formalise, you are part of the legal economy, you are inspected from time to time, you have adequate safety equipment and environmental obligations. This all costs money, it does not happen for free. So, that is part of the disincentive to formalisation. But if you can make the massive increase in gold recovery rates available to those communities, that is a very important factor in shifting the dynamics and the incentives.

Of course, it also reduces the micro-economy, particularly if you can stop the miners from using the right group first and then taking their materials to be separated, that separation is what cyanide does, and that is inherently disastrous. The creation of processing hubs is also an opportunity for the government to act with regulatory thinking. And the sudden reshaping, we are talking about several hundred local mines, but no normal oversight body could cope. However, it is possible to monitor what is being delivered to the processing plants, who is delivering, where it is coming from, and to ensure that what is being delivered truly comes from the declared sites.

This way, it gives an opportunity for the government to assert regulatory control and also to provide support services for the small-scale miners, in terms of improving their understanding of local geology, looking at their environmental practices, assessing safety issues, and we know that in many small-scale mines, the safety performance is virtually poor. Thus, it is possible to create buying points for the material, opportunities for environmental improvements, regulation, mentoring, and support. It is also possible to create funding for better inspection, as well as for the improvement of public goods.

Now, one of the things the World Gold Council has been looking at is how a network could be funded. We have looked globally and think that a network of a thousand centres or more might be needed if you were trying to cover all countries. If we can start with some of the best-resourced countries, such as Brazil, and the economics of building processing plants are quite attractive, one possibility would be to make them public-private partnerships. So, you bring in private investment and some state money, and the government retains a degree of influence or control as a form of protection against the infiltration of organised crime. And certainly, the World Gold Council is looking at the



possibility of investing and providing seed capital in pilot projects to establish this model more generally. We are aware of some very strong examples of this in Peru, for example, in Tanzania, but we really need to gain major momentum to make this happen.

Challenges include the difficulty of making the project look as good as the main character says. He is talking about building a baseball stadium. Build it and they will come. And of course, with Mrs. Whitney-Kranz, you will only have people bringing in the ore if there is regulatory pressure or the right incentives. But if you offer the incentive of massively improved recovery rates, manage to build trust and offer support, we believe this is a sustainable model.

And so, moving to the third strand, the World Gold Council created with a group of seven central banks initially, and there are more looking to participate, the central bank group that carry out gold purchasing with most of their resources. We used to report on this and said: if you are doing this, there are some problems. Why not align policy and use your purchasing power to incentivise miners to formalise, to move away from informal money, and to ensure that there are good standards amongst the people you are buying gold from? This motivated in 2023 the creation of this group, the Brazilian Central Bank is part of it.

But the group ranges from the Philippines, which has a small-scale sector purchasing programme for 30 years and buys several tonnes a year, to the far west, in Ecuador. Tanzania has just managed to buy 10 tonnes in one year from all its scale set. And we learn from their experience what it takes to make these buying programmes accessible. We learn how they can be used to disrupt exploitative trading networks that, at the same time, sell micro-explosives at one level and then pre-finance all that, as in the other, and channel gold into national reserves using local currency to create a hard currency asset or to buy and improve practices at the site level and then sell the social media responsibly.

And there are, of course, various private partnerships. There was talk about Fairtrade and certification of compliance with crisis standards as another way of doing this. There are also a number of large-scale mining companies, *Calabagold* in Nicaragua, *Mineros* in Colombia, or *B2Gold*, who take ore from neighbouring miners whom they can vouch for and process their material at their facilities. And there is, besides the LBMA (*London Bullion Market Association*) structure, or the top of the refiners, the Responsible Jewellery Council and the Responsible Minerals Initiative, which covers the technology sector. These are also ways of bringing material into the mainstream market.

The work with stakeholders resulted in the creation of what are called the London Principles. The idea is that there are 12 principles that these purchasing programmes must follow. And there is an accreditation and auditing process to verify this. They cover, in effect, community well-being, mercury reduction, *due diligence* processes, the principle of progressive improvement, organisation, setting the right incentives, and we have done a lot of work with banks on getting the pricing right, supporting and reinforcing the rule of law and tackling organised crime, accessibility of purchasing programmes, access to clean finance because a big problem in many countries is that major

commercial banks do not provide small-scale loans because there are red flags. If you can combine processing plants with traceability, that is a huge leap against *due diligence* requirements.

---

### Marina Ruete - Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF)

I am going to speak about international practices and governance practices for Artisanal and Small-Scale Gold Mining (ASGM) to take us a little bit away from Brazil and the global practice, and focus on what other countries are doing. This is a sector with enormous potential for jobs, livelihoods, and economic development—that is the global view of gold ASGM—but it also faces very significant environmental, social, health, conflict, and tenure challenges.

First, I will briefly introduce what the IGF is, because I believe almost no one knows what the IGF is, only a very few. And then I will give a brief overview of how mining governance works on a global scale, mentioning some specific country examples that may be of interest to you.

Firstly, an overview: ASGM sustains tens of millions of people worldwide. It is estimated to account for about 18% to 20% of global gold production, according to the IGF Global Council. Today, there is progress in generating income through small-scale mining; about 20 million miners in more than 70 to 80 countries depend directly or indirectly on this activity. However, most of the sector operates informally; many miners are outside the legal framework, without access to financing, technical support, environmental protection, health guarantees, and secure markets. The main concerns include environmental impacts, water pollution, mercury use, miner health and safety, child labour, illicit financial flows, and conflicts.

Here is the IGF. It is an intergovernmental forum, as the title says; it is composed of governments and a secretariat, with 86 governments being part of it. It has had its name since 2002; it is one of the first founders. It is a voluntary initiative, linked to the second UN agency. We are not part of the UN, but it is an initiative that began within the UN and is dedicated to aligning mining with the Sustainable Development Goals.

So, what do we do? Events and conferences (this year's annual meeting will be in Geneva). We also work extensively with our members; we can conduct country assessments, comparisons of good practices with the governance practices of that country, all focused exclusively on the government. We conduct capacity building, technical assistance, and we have a lot of written materials. For example, there is a guide for tailings management. If you want to know how to integrate women into mining, there is a specific guide for that, and so we have many guidelines aimed at governments.

Here are the 86 members, now we have Kiribati, which is a small island in Oceania. All the countries you see in red are those with which we have already worked on ASGM, either in ASGM management at a regional or national level.

So, how does the IGF view ASGM? The IGF represents governments. Governments consider that there are six pillars of action: the legal pillar, the mining power (meaning mining policy), mining institutions, the financial benefits and taxes. Also the socio-economic benefits, local content, public consultations, environmental handling and management, mine closure. And ASGM is treated separately, as it is a very particular sector and different from large-scale mining. We have a framework programme for all governments, with guides, reports, articles; everything is published and you can consult it on the website. We hold events and offer technical assistance. And here I leave it to you, there are many, many publications, a lot of training, you only have to ask. So, the ministry, the focal point is the ministry, has to request technical assistance, training, and we send someone for that training.

So let's go to the global level to understand how ASGM governance is viewed. Countries see ASGM governance as activities that must be included in the legal system—that is the whole legal part—and also in the economic system. Separately, there is the social and environmental protection in small-scale mining, which are particular and different from large-scale mining. We conducted many assessments in countries that consider the six pillars: laws, financial part, socio-economic, environmental, treatment, and also the mathematics (ASGM) separately. These are 14 countries in this first survey; another six countries will be delivered the following year, totalling 20. But we can already see globally how governance stands. In general, globally, countries have mining laws, mining institutions, but when we get to the practice, to the implementation, if we look at ASGM, it has very low implementation of good practices, only 4% implementation in the countries. This means that governance is generally very weak in ASGM. It is very difficult, it is complex. This is so that you do not feel alone when governance is not where it should be.

So, here we could disaggregate by region, so you see Asia, Africa, and Latin America, which is us. The light blue part is ASGM. If we look at Asia, ASGM also has 35% compliance with best practices, then Africa, and finally, the Latin American region. We are not doing well, but once again, monitoring the region is very complex; governing ASGM in this region is difficult.

So, delving a little more into Pillar 6 of ASGM and its activities, what does it mean to integrate ASGM activities into the legal system? It means that ASGM should have a legal framework, should have support and backing from the government, and also support for the various government agencies, and there should also be a formalisation strategy. This is what we call good practice, it is not average practice, it is good practice globally.

In the integration of ASGM into the economic system, it is basic to have geological information so that miners and *garimpeiros* know where to go in their operations and have mapping, help them with financing, with a tax system that is adequate for ASGM and different from large-scale mining. Fair Trade initiatives, traceability in general, are



part of the countries' governance. And this collaboration that Edward is promoting between large-scale and small-scale mining is always very productive, although in many countries it is a conflict. The government needs to be present in this relationship between large and small scale.

And finally, the last part of governance is very important, the reduction of environmental and social impacts. It is very common that, unlike large-scale mining, the government is involved in miner training. Training in productivity, on how to mitigate environmental impacts, on how to take care of water, how to prevent deforestation, how to avoid the use of mercury, help with labour and health issues—this is very different from large-scale mining. The government is very present in ASGM, or should be very present in ASGM, because, as was said before, it is a relationship between two sides. Here there is no longer a large company with its own standards, it is the government together with the miners. And so it is normal to find, or it is a good practice of government dissent, to find programmes on education and health, to ensure that there are no children in the mines and also to pay special attention to where women are in the mines in ASGM. These are the good practices considered by the 86 governments of the IGF.

In 2017, the IGF produced a guide for the State on gold mining, which basically deals with formalisation, but a formalisation understood as licensing, support for miners, monitoring of that licensing and support, in addition to law enforcement, the continuous review of formalisation strategies, because today's formalisation strategy is very different from next year's and very different from the year after, because it is a sector that evolves very quickly, it is dynamic. That is why it is very cyclical; you start with a formalisation strategy and you need to monitor it, ensure it is implemented, review it, and that it is up to date.

I wanted to show that in 2019, in Brasília, a mining strategy was created; there is a mining strategy with a special vision for Brasília. There were representatives of civil society, representatives of different government agencies, representatives of various cooperatives, such as from Peixoto, from Laurenço, from Tapajós, from the Brazilian cooperative organisation, from civil society, from the UN. We worked for a week on a vision and after that vision, we made sure there was an execution, because a vision without execution is hallucination.

We went to the site of each of the activities, and I wanted to share the vision we had before. This is to explain one part to you, to give you a vision. The group is asked to analyse what the ASGM practices are and what is seen every day, and then these practices are divided into good practices, bad practices, and unacceptable practices. And this is done this way because the unacceptable practices are the first ones that must be tackled. So, for example, the use of children in ASGM, that is unacceptable, it is the first thing that must be tackled. But then there are other practices that can be improved, such as the use of informal workers, that is a bad practice that can be improved without having to prohibit or close a mine. And then there are practices that one wants to encourage, for example, cooperativism.

And with this idea of many practices, and which are the practices that the government and the group wanted to boost, and which are the ones they want to improve and prohibit, a vision can be built. Brazil had its vision in 2019 which said, the vision for Brazil's ASGM is a legal ASGM in areas that allow mining—we are obviously talking about authorised areas—that there is respect for worker health and safety, that it operates in an organised way, with cooperativism, sustainable, and with fair trade practices. We brought in all the issues of livelihood and commercialisation, seeking sustainable mineral utilisation and the elimination of mercury use. I remember the elimination or other word for mercury, which was decided upon, in an environment that values human dignity, gender equality, that avoids corruption, that provides for dialogue and that recognises the historical and cultural role of the activities and its workforce.

So I wanted to bring it so you can react six years later and see if you have progressed. Different strategies were also defined. After this vision, specific strategies were drawn up for different pilots or regions. Just to tell you that there were practices, the impacts of each of these practices were studied, the expected results, in what timeframe, when, who were the different organisations that should be involved and what was the anticipated budget. This is the most difficult part, turning the vision into execution, so that the vision is not just an illusion. That is the really difficult part.

To conclude, what are the challenges? Globally, it is possible to mention some practices. No model is perfect globally. The models of each country are different and very specific. Formalisation can exclude actors, either due to very high requirements or very complex processes. This is something that needs to be considered, and it is a global learning. Oversight is often weak globally. Operations are generally remote and informal, difficult to monitor. The financial resources of countries are limited. It is necessary to balance support with practical measures, such as promoting legal mining activities and related causes. The transition from mercury-based methods to cleaner technologies can be slow, or meet resistance for economic or technical reasons. I think we talked about this and it is normal to find in all countries. And finally, gender and equity issues are important, because women often face barriers to access, barriers to land, to financing or to their voice in general, especially in the small-scale mining sector.

So, what are the recommendations for governments in general? To move from a principle to practice, we suggest the following recommendations that come from global practices.

1. First, adopt a national strategy—it is very important to have one—but it has to be supported by legislation with clear rules for licensing, authorisation, and include formalisation pathways.
2. Second, align with international standards for *due diligence* and traceability.
3. Third, strengthen environmental, development, and safety regulations, with special attention to mercury, tailings, water, and exposure. These are critical factors of environmental and social impacts, and must receive full attention.
4. It is necessary to build inclusive governance mechanisms—this is very important. It is necessary to include the miners in decisions, including women, in the formulation of these policies, otherwise, the policies are empty, they do not



trickle down. It is necessary to bring in local authorities, and this is a very good practice that has been done in Ghana, nowadays a large part of the execution has been transferred to each of the regions and in Honduras it has also been done, and they are two countries that are advancing very strongly by having decentralised the implementation of ASGM policies.

5. It is also necessary to use cooperatives and associations to help with representation. Providing economic and technical support is very important, facilitating access to financing, technology, and training. Subsidies or incentives for new practices, such as alternatives to mercury, are needed. That is the reality; without financial and human resources, you get nowhere.
6. Good monitoring, data, transparency, and complaint systems are needed, with data on production, environment, social impact, verification, traceability, this to ensure audits and also oversight.
7. Finally, implement pilot projects and scale-ups. The common and successful approach starts with a small region and then expands to one or two regions, and so on. This is a very effective international practice.

And lastly, in conclusion, gold ASGM presents great risks and great opportunities, but when properly regulated, it can provide sustainable livelihoods, greater equity, good environmental outcomes, and contribute to national economic objectives. Best practices are well-documented by the OECD, there are many that you can read and apply. But implementation is not trivial. Governments need political will; without political will, everything remains only a *workshop*. There need to be financial and human resources, coordination between ministries—mining, environment, health, finance, central banks, everything we discussed. There are also other non-governmental actors who are essential, especially the miners. If we can scale up what works, embed transparency and accountability, and ensure that gold ASGM is integrated into legal, socially, and environmentally responsible supply chains, then the sector can be transformed from a high-risk sector into a sector of pure opportunity.

---

### Luís Mauro Gomes Ferreira – Manager for Combating Unauthorised Activity, ANM

I come here representing two sides: the side of the project leader who is working on a new resolution for the PLG regime (Permissão de Lavra Garimpeira), meaning the enhancement of a regime—this mineral exploitation regime that is being heavily debated here regarding its legality, viewing this as a legal regime, a constitutional regime, a regime for the exploitation of that small deposit that is visible, easily accessible, and quickly exploited. And, on the other hand, last month, on August 12th, I took over the management for combating unauthorised mineral activity. So, I also represent the side that will work hard to ensure that mining is not contaminated by illegal activity, by illegal extraction. This is very important. I will present both things here and we will visualise how these two things are behaving.

Firstly, let us remember that the mineral resource is a common good. As Saint Augustine theorised in the past, a common good is that which everyone desires, everyone wants. In addition, we also have our environment, which is also a common good, we have our water, our forests are also common goods. And in our Amazon, which is the focus of our current concern, we have the zoning that was promoted by the State, where conservation units, indigenous lands, and some specific areas that were passed for mineral exploitation, specifically for the PLG regime, are represented.

So, for you to have an idea of the scale of our concern and our labour, the Tapajós Mineral Province, which is one of the main gold producers in the country, is the size of Portugal, and the largest full protection conservation unit, which is the Grão Pará, is the size of Switzerland. So, these are very large portions of the territory, and we must work in coordination—the MME, the Brazilian Mining Agency, IBAMA, ICMBio, Receita Federal, and various other bodies—to work together to develop legal activity and curb illegal activity.

Furthermore, showing you our universe of labour within the Amazon. Those are the various mining titles in different phases, from application to mining concessions, traversing this entire path permitted within the areas possible to work in the Amazon. This represents for you the desire of the mineral industry, which is what is sought within the universe of mining. Gold comes first, as you can see there in the blue band, it is the most sought-after asset within the applications in the Brazilian Legal Amazon, which represents about 60% of the national territory, or 5 million square kilometres.

In the view of society, we have several aspects that are raised regarding the issue of gold, the responsibility of mining, and so on. We have these various thoughts that focus on, that say what society wants. And there is a simple but very clear representation of what society asks the agency to work on and the agency to execute, which is to conduct oversight, to be responsible, to respond to society, and gold is the focus of this agenda.

In our normal activity, we have our oversight for both legal and illegal activity. And in illegal activity, we have to join forces. That puzzle there shows the issue of joining pieces, that is, all these bodies that met here today and yesterday and should always meet to combine efforts, work together, exchange information, databases, in short, actions that truly bring benefit to the mineral sector and to society.

I put together this diagram that represents both the path of legal activity and that of illegal activity, in this tangle of things that will lead to both legality and illegality. We work to prevent illegal mining from producing these negative effects. I listed 30; here there is only half, in the next slide you will see the other consequences, so they are very serious. So this struggle, this effort to work towards a fight against illegal activity is to curb all these negative effects that illegal activity brings, that this illegal extraction brings. So you see that our challenges are enormous. Our challenges, I say, are those of all the bodies that work, it is the Brazilian State in the fight against this activity.

Returning now to my activity of drafting an enhanced regulation, a modern regulation, a regulation that responds to society and to the sector itself what it expects, what both

expect. The sector expects and society expects from an activity that has quite a strong representation within Brazil, which is the *permissão de lavra garimpeira*, the *garimpo*.

So, from this study that was carried out, we raised several points that must be studied and improved. So this is the problem tree of the PLG, and with this, we seek a solution. One of the solutions found, which has already been discarded from this regulatory process, which is an openly publicised process, publicly disclosed and will still undergo public consultation, that is, nothing in the ANM is done without transparency and without consultation with society; everything is done this way. Every regulatory process requires and needs the acceptance and validation of society.

Justifying some things in this problem area, Resolution 208 was published, which was brought here as a benefit in some areas and a detriment in others for the sector, and we are working on this, but it is a resolution that has brought, it is already a result of this labour. As a result of this labour, some points that are indicated there, the green one, what is in green has already been covered by Resolution 208, but we have other points that will still be worked on and improved in the resolution, such as the mandatory presentation of a mining plan, since the PLG regime prescinds (does not require) a priori a research plan or a mineral research, but we can mandate a mining plan so that we can comply with other resolutions, other regulations of the mineral sector that are imposed, for example, mine closure. Mine closure is a process that goes beyond environmental rehabilitation, so it is a much broader process; few understand this, but environmental rehabilitation is a process within mine closure.

So it is a construction that we are going to make to comply with the very impositions of Brazilian society's legislation, which must also be applied to the PLG regime, the guarantee of the presence of technical criteria, we need to know where the gold is produced, which was also well raised here by Larissa, because this is very important for us, the cooling of the mining face, the quantity of mineral product that is produced at that mining face, so we need to have this basic knowledge to direct all sector management in Brazil.

In addition, registration of cooperative members and associated partners is very important. We need to know who produces and how gold or how any asset originating from PLG is transacted within the normal business chain, more clarity in operations, application of mine closure, which I already mentioned is fundamental, and a mercury use balance. Our intention is really to move towards the abolition of mercury use; it is our project, it is a country project, and with this, we will also work strongly within this resolution.

And with this vision of the resolution that we were thinking about, we followed a normal mining project cycle. What we have, by the way, within the PLG universe, is what is between the red bars. With the resolution, we are going to expand the spectrum of responsibility and technicality of the PLG regime so that it can have the necessary financial support within the business itself, which is the investment, the financing. So this is very important; only with this expansion of responsibilities and guarantees of production and all that, can we then have a way to ensure that there is an inflow of



money, an inflow of financing for the activities and it truly becomes an economic activity without the need for self-financing.

There, just an example, we have a totally messy activity, as is said in Portuguese, irregular, and we need to move towards an activity that is totally guided by the best techniques, with the use of appropriate machinery, with the use of renewable energy. I will not elaborate here on what I think or do not think about the division of regimes in Brazil, but it is what we have; we have a division of mineral exploitation regimes in Brazil, and it is particular to each typology of mineral assets. This can change in the future, but it is what we have now, so we need to have a modernisation of this regime which is very important in Brazilian society.