# Tin for Tomorrow

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# **Mariano Pero**

Operaciones Metalurgicas S.A.(OMSA), Bolivia ITA Chairman

Good morning, dear friends.

I'm honoured to be here with you today as we talk about the future of our industry.

As I look around the room, it's a delight to see so many familiar faces. I look forward to reconnecting with you all and meeting the new faces too.

As we know, tin has had a remarkable journey, with 5,000 years of history behind it. From its simple origins in the Bronze Age to becoming a key part of modern life, now and well into the future. It has an impressive history, and I firmly believe it has an even more impressive future.

And why is that? Well, tin is often called the "spice element," because it is everywhere in our modern lives in ways that few people realise. And as "the glue that connects all electronics" it plays an essential role, forming billions of solder joints for every device we rely on today.

But as we look towards 2030, our industry is at a turning point.

We have many challenges ahead of us — and I will touch on them later - but we also have many opportunities too. Being here together this week in Penang is just one of those opportunities. We have an invaluable chance to meet with old and new friends from all over the world. To share our experiences and insights to strengthen our industry. I urge you to take this opportunity.

In addition, there is great potential for new investment, for technology demand and for positioning tin as a truly sustainable metal. This is something we should aim for and can celebrate together.

I'm proud to chair the International Tin Association at this critical moment in the world of tin. As the only organisation dedicated to supporting the tin industry, we are uniquely positioned and deeply committed to providing leadership to our industry into the future.

We based our TIN2030 vision – co-created with many of you here in this room - on three pillars: Sustainability, Technology and Markets. From which, all our activities will grow. And from which I have structured my talk with you today.

#### Sustainability

The first pillar I want to talk to you about is sustainability.

Our commitment to sustainability comes from the knowledge that Earth's resources are not endless. The mining, processing, and refining of tin must be done with care. We must reduce our impact on local communities, the environment, and generate local economic benefits. This involves adopting

practices that ensure the long-term viability and health of our mines, respectful local stakeholder engagement, investing in new technologies and greening our supply chains.

Tin should of course be recycled. And we are keen to contribute to the ambition of achieving a more circular economy by extending the life cycle of tin products and reducing the demand on new primary resources.

We also recognise the importance of bringing transparency to our final customers to ensure they have confidence in our industry. For many years we have led the development and implementation of global tin industry standards and due diligence practices. Our Tin Code and its new ITA Assurance system have matured into important tools for the industry and show our collective commitment to achieving sustainability goals.

By 2030, we aim to have given vital support to our industry in meeting the ever wider and deeper environmental, social and governance, expectations of our customers and society. As we all navigate through these waters together, ITAs unparalleled knowledge and experience uniquely positions us to steer the way in creating a sustainable path forward for the industry.

Tackling environmental impacts is a key goal. We must all individually and collectively look at our responsibility to reduce environmental footprint including the use of more efficient technologies. To that end last year, ITA published our benchmark life cycle assessment study. This report highlights the importance of reducing our use of all resources, including energy, water, coal, and other materials.

We have ambitious goals, but they are achievable with the support of our expert ITA teams and united commitment to focused effort, collaboration and innovation.

# **Technology**

Our second pillar is of course technology. And this is a very exciting area.

Our industry is on the verge of big technology changes. Tin is at the centre of many new technologies, from renewable energy systems to advanced electronics and AI chips.

Our commitment to innovation is about expanding the possibilities of how tin can be used, making it not just a metal from the Bronze age....but a metal that is at the core of the future.

Tin is already essential to global ambitions for the energy transition and digitalisation.

For example, the huge growth in the electric vehicles market depends substantially on tin as solder connecting the electronics, the battery systems, the wiring and even the charging infrastructure. And when you consider that almost 40% of all cars made will be fully electric by 2030, that is more than double from 18% today. That alone is substantial growth. As one analyst said - 'electric vehicles are not leaving the garage without tin.'

Another example, that is clearly visible, is the metallic tin solder strips across the front of every solar panel. Tin is the essential element that holds the modules together and helps conduct the electricity to the grid. Did you know that tin use in solar panels has more than tripled in five years to 35,000 tonnes and will likely exceed 40,000 tonnes by 2030. Amazing right? And it shows you the vital role tin plays in enabling governments to achieve their solar energy targets.

Digitalisation is a third new driver for tin use, now boosted by the launch of AI. Built on an evergrowing 5G platform, our world is changing as smart devices become even more intelligent. Looking forward, new technologies will be more and more important for the tin industry. Not only as an opportunity for demand growth, but also to unlock new resources such as recovering tin from waste electronics.

At ITA, we are proud of our long legacy in tin research, and we are ready to respond in these exciting times. As the International Tin Research Institute our many collaborative projects allowed us to establish a unique knowledge base and global networks. Now we want to boost our resources and help capture some of those new ideas being explored in research labs across the world. If we can identify the most promising solutions and bring the right people together, we can create the potential to significantly reduce the time and cost of developing new technologies.

We are also aiming to speed up investment in research and innovation to make full use of tin's unique properties to meet the demands of emerging technologies. For example, we are especially exploring the use of tin in energy storage solutions, which could change how we think about and use energy. Energy storage capacity globally is expected to more than triple to 370 Gigawatt hours by 2030. So, I am delighted to be able to bring to this conference representatives from two startups who have funding to commercialise tin use in sodium-ion batteries.

We firmly believe that by fostering a culture of innovation within our industry, we can ensure that tin remains essential to technological advancement.

#### **Markets**

So now, let me move onto our third and final pillar – markets.

As for the tin market itself, we all know that it is strongly reflecting the economic and geopolitical turbulence we see in the world around us. This was also a big part of our TIN2030 consultation, and we are sure it will be the focus of many discussions here at our conference.

The world is changing very fast. The last five years have seen waves of growth and decline with unprecedented price volatility. At the same time supply chains are changing drastically, with an evergreater focus on resources we all need for the future. And it is not just about how much tin is produced and how it is used, but where and how it is produced and used.

We have seen tin prices once again breach \$35,000 in the last month, as supply remains choked off in the Wa region and as vital supplies from Indonesia struggle to recover into Q2. LME stocks are down to the wire, while Chinese SHFE exchange stocks are at record highs. These extreme dynamics challenge even the best forecasts.

As we face these hurdles together, ITA's market intelligence team continues to deliver a valuable service to our industry, and we will hear from them shortly.

Based on years of data processing, an in-depth knowledge of the primary producers, mine sites, smelter locations and surroundings, and its own primary data sources, our team has unique and authoritative insights. Our data underpins much of the investment that keeps the tin industry growing. Our offices in the UK and China work closely together to engage, understand and inform the industry on the ever more complex market dynamics.

Our team is already hard at work, using the latest data and AI technologies to provide new tools and visualisations that will significantly improve our collective understanding. At the same time our modelling is delivering ever more accurate supply and demand forecasts. Now we are also expanding our scope to look at some of the more strategic issues for the industry, such as mapping available resources. We look forward to sharing more with you in the coming months.

Our insights, thanks to inputs from our members, associates, and relations, chart a clear map of information that provides leading knowledge of what has happened and what is likely to come.

### **Collaboration**

Finally, you will have heard me mention collaboration many times. I have no doubt that collaboration is the key to unlocking our full potential as an industry. The challenges we face are complex and interconnected, requiring a united effort.

We want to build on the success of our TIN2030 launch, with over 700 stakeholders engaging with our report. And to expand the conversation further. Events like this Tin Conference are vital in moving our dialogue forward. And collaboration within the industry is indispensable for our success as the eyes, ears, and voice of the industry. And I thank you for that.

To further boost our collaboration, we are strengthening our partnerships across the supply chain. We are working with miners, manufacturers, and end-users to ensure that the tin industry is sustainable, responsible, and reliable.

We are reaching out to governments and international bodies to align our efforts with global sustainability goals. By sharing knowledge, resources, and best practices, we can overcome obstacles more efficiently and effectively.

We are collaborating beyond our industry; focusing on creating a dialogue with communities, listening to their needs, and ensuring that our operations benefit everyone involved.

We are also starting to actively engage with new investor communities, many of whom are coming into the tin industry for the first time. We want to demonstrate the new tin supply opportunities and urge new investment. We are encouraged also to see governments now starting to recognise the importance of tin and we will work to support that dialogue with market data and technical guidance.

In fact, ITA has a unique ability as a global trade association to leverage its position at the heart of the industry, to be a forum for dialogue and a platform for cooperation. And we look forward to continuing to deliver that value to our industry for years to come.

## Conclusion

In closing, as we look towards 2030, let us remember that our journey is not just about the tin we produce, but about how we produce it. It is about the innovations we bring to the table. And the partnerships we forge along the way.

It is also our shared commitment to ensuring that this vital resource is used wisely, efficiently, and responsibly.

ITA's focus on Sustainability, Technology, Markets and to increasing collaboration will ensure that the tin industry not only survives but thrives in the years to come.

Together, let us all focus on tin for what it is - an essential, strategic, and futuristic metal.

Together we are making the future, for the benefit of society and for future generations.

Thank you for joining me in this important conversation. And I urge you to continue this discussion throughout the conference.

Here's to a bright and promising TIN 2030. Thank you for listening.