

COMMUNITY OF PRACTICE ON

LEAD IN PAINT

Organized by the SAICM Secretariat and the University of Cape Town

Issue: 2 of 2022

Discussion date: 25th May 2022

DISCUSSION DIGEST

Topic of Discussion: Transitioning to paints without added lead: guidance and experience in reformulation.

The second Lead in Paint Community of Practice (LiP CoP) discussion for 2022, introduced by Dr Branko Dunjic from Cleaner Production Centre in Serbia, explored aspects related to the transition to paint without added lead and the [UNEP Lead Paint Reformulation Technical Guidelines](#). Sammy Felisario from Rajawali Hiyoto – an Indonesian SME - presented on the reformulation efforts timeline from 1973 to 2022 including key aspects of the success of the project. Marcos Alegre from the Peruvian National Cleaner Production Centre (Grupo GEA) presented on initiatives from industry and governments to facilitate progress toward reformulating lead in paint and Husam Alkilany from the Cleaner Production Unit of the Royal Scientific Society of Jordan presented on the benefits of the Lead Paint Reformulation Technical Guidelines in scaling up the production of paint without added lead.

To view the PowerPoint presentation of the discussion, click [here](#).

ABOUT THE PRESENTERS



Dr Branko Dunjic is managing Cleaner Production Centre in Serbia, established in the frame of a UNIDO-sponsored project since 2007. He has published over 40 scientific papers and he is the co-author of 4 patents.



Sammy Felisario is a licensed chemical engineer. He had been in several organisations including Sadolin (Akzo Nobel) before joining Rajawali Hiyoto (an Indonesian paint SME) as an R&D Manager and Technical Adviser.



Husam Alkilany is a Manager of Environmental Studies at the Royal Scientific Society of Jordan and a Senior Specialist within the Cleaner Production Unit. He holds an MSc degree in Water Resources and Environmental Engineering. Mr Alkilany has experience in different environmental areas including chemical management, cleaner production, and environmental impact assessment. He has worked for national and international companies and coordinated and managed the project at the national level.

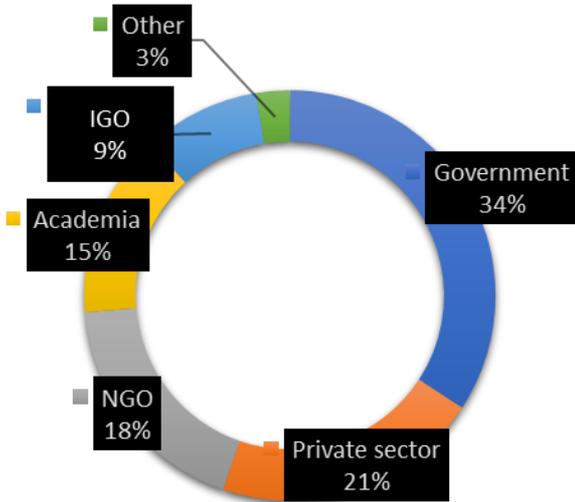


Marcos Alegre is a Sanitary Engineer with a Master of Science in Water and Environmental Management from Loughborough University, UK. Mr Alegre is the former President of the Global Network for Resource Efficiency and Cleaner Production (RECPnet) and Vice Ministry of Environmental Management of the Ministry of the Environment. Currently, he holds the position of Senior Specialist in RECP of the Peruvian National Cleaner Production Centre operated by Grupo GEA in Perú.

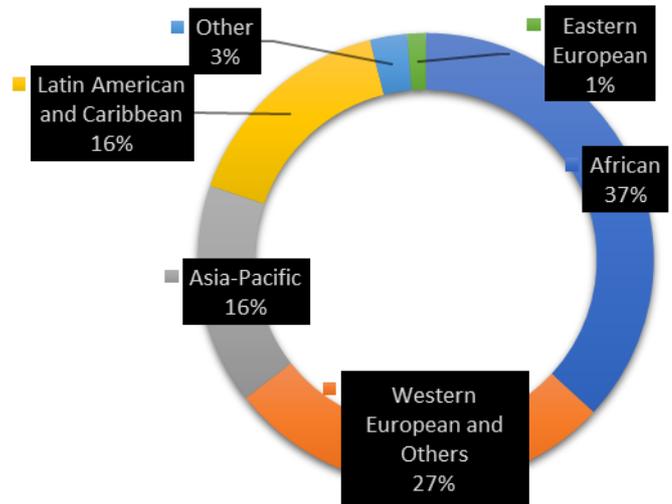
2022 DISCUSSION 2 ATTENDANCE BREAKDOWN

TOTAL DISCUSSION 2 ATTENDEES: 76
Male – 55%
Female – 43%
Unknown – 1%

Stakeholder Representation



Regional Representation



Key:
IGOs – Intergovernmental Organisations
NGOs – Non-governmental Organisations

Lead in Paint Community of Practice 2022 Discussion 2 Summary

1. This discussion builds on the June 2021 discussion, which highlighted that **lead paint reformulation is entirely possible**. Following more than two years of small and medium-sized enterprises (SMEs) undertaking pilots to reformulate lead paint with the support of the [SAICM GEF 9771 project](#), the discussion provides **guidance and insights on paint reformulation** based on the experiences of different SMEs and case studies. The discussion also highlighted the challenges, opportunities, and the importance of engaging other stakeholders on reformulation based on practitioners' experiences. Presenters provided information on key elements to promote successful reformulation, how industry and government can collaborate, and what can be done to scale up reformulation.

2. This discussion was also an opportunity to launch **the final Lead Paint Reformulation Technical Guidelines** (hereafter the technical guidelines) and its summary document entitled "Reformulation is Entirely Possible: Summary of the Lead Paint Reformulation Technical Guidelines and How to Use this Information". The guidelines and the summary provide a helpful starting point for all stakeholders wishing to learn more about best practices in lead paint reformulation, but they cannot cover every single iteration, as there are many different formulations which use lead for color and other paint properties. They provide general information on paint reformulation processes, a step-by-step approach on how to do reformulation, where to find relevant information such as alternative raw materials, some examples of specific alternative pigment formulations, and additional details such as standards for paint performance testing. In-depth analyses and more specific data from pilot demonstrations were provided through the SAICM GEF project to participating companies and are described in case studies in the Appendix of the guidelines.

3. Participants discussed key elements in a company, community or country that promote successful reformulation of lead paint. Different **elements can contribute to a successful paint reformulation** and can be specific to a paint industry or a particular country. Nevertheless, some common elements can be found in different cases:

- Awareness-raising efforts on health and environmental impacts of lead by NGOs to industry
- Legislative incentives for compliance with a soon-to-be-adopted lead paint law
- Technical support and exchange with alternative pigments suppliers
- Effective requirement date to phase out lead paint
- Cooperation, collaboration, and discussion between the different stakeholders involved in regulating lead paint (industry, government representatives, etc.)
- Commitment by top management in paint companies

4. The discussion explored how industry and government collaboration and exchange of perspectives can facilitate progress towards the reformulation of lead paint, whether through proactive industry engagement or government establishing a law. **Dialogue between industry and government can facilitate progress** toward both reformulating lead in paint and adoption of a lead paint law, as information exchange and communication are crucial to start building (and later establish) a consensus. Establishing a technical committee involving stakeholders such as governmental agencies, industry representatives, practitioners in the field, etc., can support this effort and fast-track the progress. This has been the case in Peru, for instance. Once a lead paint law is adopted, the technical committee could still advise on different and targeted activities to ensure an efficient implementation of the law.

5. Participants shared what needs to be done in their company, community, or country to scale up the production of paint without added lead. Reformulation of paint initially occurs on a small scale, often with many trials of different ingredients. Once paint has been successfully reformulated on a small scale, it is necessary to scale up production in order to make enough product for the market. Despite drivers for reformulation, a paint company might still face some challenges (availability of pigments on the local market, cultural preferences for leaded shades, etc.). The **technical guidelines can facilitate the scaling up of reformulated paint** by providing information about alternative pigment, case studies on reformulation, including the scaling-up, etc.

ANNEX

DETAILED SUMMARY OF 2022 DISCUSSION 2

Disclaimer: The information in this digest represents the opinions of members participating from different stakeholder groups expressed during the discussion. The views expressed in this document do not necessarily represent the opinion or the stated policy of the United Nations Environment Programme, the SAICM Secretariat, the GEF or UCT, nor does citing trade names or commercial processes constitute endorsement.

THE DISCUSSION WAS STRUCTURED AROUND THREE QUESTIONS AND THE KEY DISCUSSION INPUTS FROM PARTICIPANTS ARE PRESENTED UNDER EACH:

Question 1. In your view, what are the key elements in a company, community or country that promote successful reformulation of lead paint?

COUNTRY	PARTICIPANT'S RESPONSES
BRAZIL (PRIVATE SECTOR)	<ul style="list-style-type: none"> - First, there must be clear legislation and willingness from companies to exchange lead pigments for organic or lead-free pigments as customers are aware that lead-free products are safer to use.
CAMEROON (NGO)	<ul style="list-style-type: none"> - Having penalties.
COLOMBIA (NGO)	<ul style="list-style-type: none"> - To raise awareness and give examples that it is possible and cost-effective to reformulate lead-containing paints.
KENYA (GOVERNMENT)	<ul style="list-style-type: none"> - Enforcement and awareness creation.
MADAGASCAR (GOVERNMENT)	<ul style="list-style-type: none"> - The key element in a company, a community or a country which promote a successful reformulation of lead paint is on the one hand the reinforcement of the awareness but also on the other hand given the time necessary for the producer to reformulate their product.
MOROCCO (PRIVATE SECTOR)	<ul style="list-style-type: none"> - Companies must set up regulations with limits. - The population needs to be made aware of the risks of paint containing lead. - Lastly, the government must accompany the companies to find means of substitution and encourage them to integrate, perhaps put in place tax reductions.
NEPAL (NGO)	<ul style="list-style-type: none"> - Periodic and strict compliance monitoring will help companies to adopt the formulation process.
OTHERS (COUNTRY AND SECTOR NOT SPECIFIED)	<ul style="list-style-type: none"> - Advocacy, economic policy instruments and awareness-raising are the key elements. - Risk communication, stakeholder involvement and awareness-raising through media such as newspapers, policy brief, and school curriculum.
PERU (NGO)	<ul style="list-style-type: none"> - Reformulating paints with SMEs is a real challenge, it also depends on the type of clients and business capacity of the SMEs. Working with financially stable SMEs makes reformulation easy. - An important key element is the awareness of the end-user who acquires these products (information to the consumer - client - and their power to sue for lead-free paints). Raising awareness must have the support and leadership of the government (verification or validation of the lead-free paints) and the private sector (profitability products to offer) to achieve large scale impacts.
SOUTH AFRICA (PRIVATE SECTOR)	<ul style="list-style-type: none"> - The customer's requirements need to be satisfied and there needs to be an understanding of a product composition to correctly classify it. e.g., supplier's raw materials need to be accurately screened.
SOUTH AFRICA (ACADEMIA)	<ul style="list-style-type: none"> - To draw attention to that reformulation is possible in different countries and cost-effective.

TANZANIA (NGO)	<ul style="list-style-type: none"> - Performing accurate lab testing, availability of suppliers, and receiving support from stakeholders are key for successful reformulation and public awareness-raising.
TANZANIA (GOVERNMENT)	<ul style="list-style-type: none"> - Having stringent regulations and raising awareness among all stakeholders.
TUNISIA (GOVERNMENT)	<ul style="list-style-type: none"> - To publish laws which reduce taxes for raw materials without lead used in paints.
UNITED KINGDOM (NGO)	<ul style="list-style-type: none"> - The key elements that promote successful reformulation of lead paint are company management's commitment and availability of suppliers.
USA (PRIVATE SECTOR)	<ul style="list-style-type: none"> - For a company, having access to alternate suppliers and to lead testing is also affordable for multiple re-tests as formulations change. For countries like the USA, there is a need to open discussions on lead regulations and restrictions and ways for companies to comply with these. The government should provide enforcement and guidance outside of efforts from companies. - Compliance to 12.5 ppm lead without labelling requirements in the US for artist paint members of the Arts and Creative Material Institute (ACMI) before 2019 was also 90 ppm. Reformulating was much easier during that time. - This limit is for the final product. Raw materials reach that limit alone, making reformulation very difficult to achieve with quality products meeting this limit. - Artist paints are tested for lead and other materials and labelling are required.
USA (PRIVATE)	<ul style="list-style-type: none"> - Enforcement and public education are the two largest measures forcing changes in the lead reformulation
USA (PRIVATE SECTOR)	<ul style="list-style-type: none"> - One driver to eliminating lead paint in the USA was the hazardous waste regulations enacted in the 1970s and 1980s. High fines for disposal of lead paint sludge. - Lead pigments and additives are unnecessary for performance in industrial and consumer paints in California or anywhere else. The formulation of industrial powder coatings has taken place since 1978 without ever using lead pigments. - SMEs are hard-pressed to reformulate because of a lack of funds and resources. - Eliminating the existing inventory of leaded pigments at SMEs should be part of the government's financial support. - There must be a partnership between the coating formulators and the pigment companies. - Cost considerations go beyond the raw material cost but also the cost of application and use and efficiency of the coating. - A good database of every pigment ever conceived historically: http://www.artiscreation.com/Color_index_names.html
ZIMBABWE (SECTOR NOT SPECIFIED)	<ul style="list-style-type: none"> - Awareness-raising is a key element.
PRESENTER AND COORDINATOR COMMENTS	<ul style="list-style-type: none"> - The key element is the existence of regulation and strict enforcement. - In terms of awareness-raising, the next discussions will take place on preparing for International Lead Poisoning Prevention Week of actin, 13 July. Please register here https://saicmknowledge.org/event/online-discussion-preparing-10th-international-lead-poisoning-prevention-week. - Some countries have taken the approach to require companies to certify with testing that paints are below 90 ppm. - We developed 3 case studies in the technical guidelines. An example from Ecuador shows that the lead content was reduced from more than 34,689 ppm to 56 ppm. - The US Federal limit for lead in paint is 90 ppm.

COMMENTS/QUESTIONS FROM PARTICIPANTS RESPONSES

USA
(PRIVATE SECTOR):
The issue is that the lead is already in the raw materials, there is no additional lead added to the products, however, there is still an excess to the levels with some raw materials. Some paints were exceeding the 90-ppm level before reformulation.

Most countries are selecting a 90-ppm limit, as articulated in the UNEP Model law and guidance for regulating lead paint.
The Model Law is available here:
<https://www.unep.org/resources/publication/model-law-and-guidance-regulating-lead-paint>

Some additional exchanges between participants and presenters/coordinators.

Question from presenters: Was there lead contamination in the raw materials? If so, that is why the Model law focuses on requiring testing of paints, not just checking the safety data sheets (SDSs) for ingredients.

Response from participant: There was extensive testing done to figure out where the lead originated from. It was found that certain pigments have high lead levels causing the final product to exceed the limits. The only way to counteract this was to lower the content of those raw materials, as all suppliers who offered those materials were similar.
However, without intentionally adding lead one should be able to meet the 90-ppm limit. Generally, in the SDSs, a 1000 ppm is received as the cut-off for reporting. There is a need to have pigments which fall far below that level.

Question from presenters: Which types of paints exceed 90 ppm before reformulation? Yes, naturally occurring pigments may contain lead as a naturally occurring element. That is why it is important to secure documents from suppliers of raw materials which will show these do not contain lead. The lead could be found in other raw materials, clays for example.

Response from participant: It was discovered that natural occurring pigments are containing high lead, and the levels have been slowly rising throughout the years.
It is known that copper oxides for marine paints can contain high levels of lead due to recycled copper-containing lead from solder in copper pipes.

BRAZIL
(PRIVATE):

Some segments have raw materials containing residual lead, for example in copper oxide used in antifoulings, where the raw material still has a high residual of free lead. This causes a problem in finished products with levels above 100 ppm.

Throughout the discussion, informal polls were conducted to help encourage discussion among the participants. They do not provide any representative data but rather provide a snapshot of participant views.

Poll 2 Results (N=23):

What is your role with regard to paint? Each participant selected one response. (Select one option)

- NGO/Advocate promoting paint without added lead, 30%, (n=7)
- Regulator of paint products, 22%, (n=5)
- No role in relationship to paint, 13%, (n=3)
- Other (Please add in comment), 13%, (n=3)
- Producer, 9%, (n=2)
- Suppliers of raw materials used in paint production, 4%, (n=1).
- Customer/End-user, 4%, (n=1)
- Laboratory testing lead levels in paint, 4%, (n=1)
- Importer/Distributor/Retailer, 0%, (n=0)

Responses in the chat:

USA (PRIVATE SECTOR - CREATIVE PRODUCTS)

- ERIN_Certificates of compliance

MADAGASCAR (GOVERNMENT)

- Responsible for the Lead in paints project in Madagascar.

OTHER

- NGO

Poll 3 Results (N=21):

How will you use the technical guidelines on paint reformulation? (Select one option)

- Inform me or share with others (i.e., SMEs, paint manufacturers) about paint, 43%, (n=9)
- Inform those who are developing lead paint laws, 29%, (n=6)
- Reformulation and best practices, 10%, (n=2)
- Inform those who will enforce lead paint laws, 10%, (n=2)
- Other (Please comment in the chat), 5%, (n=1)
- Find out about alternative pigments and suppliers, 5%, (n=1)
- Learn the steps necessary to reformulate paint, 0%, (n=0)
- Guide implementation of an existing lead paint law, 0%, (n=0)
- Make a case for the feasibility of paint reformulation, 0%, (n=0)
- I will not use the technical guidelines (please add a reason in the chat), 0%, (n=0)

Responses in the chat:

ZAMBIA (GOVERNMENT)

- Make non-lead pigment alternatives readily available using formal channels as publications from a regulatory body.

PERU (NGO)

- We will also use the technical guidelines for implementing an existing lead in paint law in Peru

MADAGASCAR (GOVERNMENT)

- Educate me or share with others (i.e., SMEs, paint manufacturers) on paint reformulation and best practices.

Question 2. How can industry and government collaboration and exchange of perspectives facilitate progress towards the reformulation of lead paint, whether through proactive industry engagement or government establishing a law?

COUNTRIES	COMMENTS
BRAZIL (PRIVATE SECTOR)	<ul style="list-style-type: none"> - Conscientious companies tend to perform reformulation with a focus on reducing the hazards of the products, however, when there is a law and clear deadlines for replacement, this can speed up the reformulation process.
JORDAN (NGO)	<ul style="list-style-type: none"> - Create a dialogue between the government and industry to agree jointly on a program for phasing out lead in paint.
KENYA (GOVERNMENT)	<ul style="list-style-type: none"> - Collectively develop a law that the industry owns, and create an enabling environment by reducing taxes and tariffs for an alternative.
MADAGASCAR (GOVERNMENT)	<ul style="list-style-type: none"> - Madagascar created an intersectoral lead paint committee of the government, private sector, and civil society organisations that work to implement this project. - In the annual work plan of this project, there is an assistance plan for small businesses on the reformulation of lead paint supported by LEEP (Lead Exposure Elimination Project).
MEXICO (PRIVATE SECTOR)	<ul style="list-style-type: none"> - The industry can advise the governments about reformulation, mainly in the challenges the law needs to consider, such as the availability of raw materials.
MOROCCO (GOVERNMENT)	<ul style="list-style-type: none"> - Industrial associations must have a role in raising industrial awareness.
NEPAL (NGO)	<ul style="list-style-type: none"> - Industry cooperation with the government to effectively implement the mandatory law on the reformulation of products containing lead. - The government should also help the industry in improving their technical capacity to reformulate their product while they envision periodic compliance monitoring and make the monitoring data public.
PANAMA (GOVERNMENT)	<ul style="list-style-type: none"> - In Colombia, the association of the paint industry work closely with the government. Together, they are searching for new providers and technologies to help their members.
PERU (NGO)	<ul style="list-style-type: none"> - In Peru, the industry provided inputs to the government to produce a "feasible" law, including input on deadlines for different steps, the type of labelling used, and how to ensure that paints have less than 90ppm. - Before the lead in paint law, there was a company producing paints with low content of lead, since they sell paints to some industries that require lead free paint. - A law helps but if the company does not see a competitive advantage, it will be difficult to achieve the goals established in the law, especially in countries with limited enforcement capacity.
PHILIPPINES (NGO)	<ul style="list-style-type: none"> - In many countries, a paint industry association (whose members include producers, sellers, raw materials suppliers, etc.) need to ensure that among its members, everyone follows the law. - In the absence of any laws, the industry can work with the government in setting standards and regulations.
SERBIA (NGO)	<ul style="list-style-type: none"> - Establishing a law after the discussion with the industry.
SOUTH AFRICA (PRIVATE)	<ul style="list-style-type: none"> - Having stakeholder engagements is key between Government and paint manufacturers/suppliers and other critical stakeholders. This will help government understand the challenges at hand when developing/ implementing paint laws, establishing regulatory limits, etc.
TANZANIA (NGO)	<ul style="list-style-type: none"> - Both industry initiative and government establishment of the law must go together.
TANZANIA (GOVERNMENT)	<ul style="list-style-type: none"> - While establishing regulation, the government must involve a representative from the industries
TUNISIA	<ul style="list-style-type: none"> - Engagement of industry and a published law by government.

(GOVERNMENT)	
USA (PRIVATE SECTOR)	<ul style="list-style-type: none"> - Investing in an independent lab that can assess the lead content of raw materials. - Engage the large pigment companies on a humanitarian basis to financially support the effort for lead testing.
INDONESIA (NGO)	<ul style="list-style-type: none"> - From the experience in Indonesia, the role of the third party helped bridge industry engagement and the relevant government agencies.
ZAMBIA (GOVERNMENT)	<ul style="list-style-type: none"> - Zambia has developed a national standard on lead through a process involving the paint industry, NGOs, and Regulatory authorities. - The standard limits lead in paint at 90ppm and also specifies testing methods. - Similarly, regulation is being drafted.
PRESENTER AND COORDINATOR COMMENTS	<p>The summary document is available here: https://www.unep.org/resources/toolkits-manuals-and-guides/reformulation-entirely-possible-summary-lead-paint</p> <ul style="list-style-type: none"> - To support stakeholders to comply with a lead paint law, UNEP together with a working group of partners from the Lead Paint Alliance is developing guidance on compliance and enforcement with lead paint laws. The document will be released in the 6 UN languages in a few months. - The last discussion of the year on the LiP CoP will focus on compliance with a lead paint law: https://saicmknowledge.org/event/online-discussion-compliance-lead-paint-laws. We are looking forward to discussing this aspect with you! - Here is the technical guideline, where you can see the example of Epoxy Floor. https://www.unep.org/resources/toolkits-manuals-and-guides/lead-paint-reformulation-technical-guidelines

Poll 3 Results (N=21):

With which stakeholders will you share the technical guidelines? (Select all that apply)

- Industry association ,24%, (n=22)
- Paint manufacturers, 18, (n=17)
- Relevant government officials, 16%, (n=15)
- Paint importers/exporters, 11%, (n=10)
- Academia, 11%, (n=10)
- NGO, 10%, (n=9)
- Paint retailers, 8%, ((n=7)
- Other (please add in comment), 2%, (n=2)
- The suggested stakeholders are not relevant, 0%, (n=0)
- None, 0%, (n=0)

Responses in the chat:

NEPAL (NGO)

- Other stakeholders who might be shared the guideline are the laboratory which provides testing facilities.

TANZANIA (GOVERNMENT)

- Formulate regulations that will aid the collaboration between government and industries.

SIERRA LEONE (GOVERNMENT)

- Establishment of the law and enforcement and provide an alternative formulation

MADAGASCAR (GOVERNMENT)

- Relevant government officials.

COORDINATOR'S COMMENT

- To help disseminate the technical guideline, we have also developed a summary document, which highlights the key points from the guidelines and how the information from the Guidelines can be used by different stakeholders involved in the phasing out of lead paint.

Poll 5 Results (N=25):

In your view, which factors lead to the industry taking initiatives towards reformulation? (Select one option)

- Government establishing lead paint laws, 36%, (n=9)
- Competitive advantage/Position as a “paint without added-lead” leader on the market, 24%, (n=6)
- Price of reformulation/economic feasibility, 12%, (n=3)
- Environmental/social responsibility, 8%, (n=2)
- Others (please indicate in the chat), 8%, (n=2)
- Technical knowledge and capacity of personne 1,8%, (n=2)
- Availability of pigment in the local market, 4%, (n=1)
- Availability of equipment/lab capacity, 0%, (n=0)

Responses in the chat:

NEPAL (NGO)

- The technical guideline should also share with the Third-Party Certifying agencies.

INDONESIA (NGO)

- We see an advantage when sharing reformulation documents with partners/direct actors. They understand technical dictions/terms that make it easy for SMEs when we translate the document into Bahasa Indonesia.

BENIN (ACADEMIA)

- All the stakeholders are important for the quick implementation of the law.

MADAGASCAR (GOVERNMENT)

- Environmental/social responsibility.

Question 3. In your view, what needs to be done in your company, community, or country to scale up the production of paint without added lead?

COUNTRIES	PARTICIPANT’S RESPONSES
BRAZIL (PRIVATE SECTOR)	- First, having a law published with adequate deadlines for compliance would be the best way. With a published law, companies usually seek to adapt more quickly and meet deadlines with exceptions for some product lines, for example, antifoulings due to raw materials and in that case the law should mention this exception.
CAMEROON (NGO)	- NGOs should raise awareness about the dangers of lead in paint, which could prevent them from buying it.
JAMAICA (NGO)	- In Jamaica, there needs to be an assessment of companies’ capacity to do transition to no lead additives in paint and training be done on the processes and requirements for reformulation.
JORDAN (NGO)	- Create Public momentum toward phasing out lead in paint by awareness raising. - Addressing different actions at one time i.e., awareness, technical support to companies and working on law.
KENYA (GOVERNMENT)	- Provide affordable alternatives, make laws to regulate the use of lead in paints, and enforce the laws.
MOROCCO (GOVERNMENT)	- In Morocco, the level of lead in paint has been set by law at 90ppm. - To be able to apply the law, it is necessary to provide industrialists with alternative formulations, encourage industrialists and carry out checks on the paint sold on the market.
MADAGASCAR (GOVERNMENT)	- I think we need to increase awareness (health and environmental impact) at the national level to increase the production of paint without added lead.
NEPAL (NGO)	- Robust compliance monitoring and make the data available to paint companies so that they have access to information of the lead in paint footprint and the paints that are selected or rejected.

OTHERS	<ul style="list-style-type: none"> - Avoid corruption among inspecting and monitoring agencies. - Good Business and Human rights practices.
PERU (NGO)	<ul style="list-style-type: none"> - Awareness about the dangers of adding lead to the paint to be brought to the decision-makers, manufacturers, and users to be continuously done especially in the developing countries. - The scale-up of the production - economically viable suggestions to be given to the manufacturers so that they can switch. - Set a monitoring team to implement the new regulation policy. - Technical capacity to companies (mainly SMEs), and incentives from government. - To scale-up an option is to channel Research and Development (R&D) funds usually available in public programmes for SME competitiveness and involve Academia in this process.
SERBIA (ACADEMIA)	<ul style="list-style-type: none"> - From the experience in Serbia, a good partnership with the raw materials suppliers was very helpful.
SOUTH AFRICA (PRIVATE)	<ul style="list-style-type: none"> - Awareness-raising activities to build momentum for countries to develop, adopt, and implement legally binding measures, such as laws, regulations, and standards.
TUNISIA (GOVERNMENT)	<ul style="list-style-type: none"> - Publish the law, population awareness, label " lead-free paint", and control and support small factories.
TANZANIA (NGO)	<ul style="list-style-type: none"> - Strict enforcement of regulations/standards, awareness of consumers, availability of labs with good quality - Some lead-free paints were found to be cheaper than leaded paint in Tanzania in 2017, which means the cost of reformulation may not be a barrier, research by the industry for the availability of cheaper pigments can solve that.
TANZANIA (GOVERNMENT)	<ul style="list-style-type: none"> - I think the country may provide subsidies (reducing taxes) for all paints that are lead-free to enhance the production of lead-free paints - Alternative materials should be subsidised by the government and paint industry stakeholders to make them cheap and available.
USA (PRIVATE)	<ul style="list-style-type: none"> - It would be helpful if the WHO/USEPA can find funds to support the establishment of regional independent laboratories that can reformulate specific paint formulas for SMEs like independent labs in Southeast Asia, Africa, and South America. - Funding and technical Support could come from the major pigment manufacturers as well. - Coordinate efforts with local coatings associations. - Paint formulators can provide webinars on how to reformulate coatings. - The economics of the reformulation must work, regardless of regulations. The applied cost has to be reasonable. - Mobile lead safety training tools for workers who may incorrectly use common renovation work practices producing specks of dust-containing lead products. - Pigment companies are willing to share knowledge, and are independent as well. - Applied cost is a critical consideration. Non-lead-containing coatings have a lower specific gravity and therefore better coverage than the high SG lead-containing paints. These impacts cost favourably for non-lead formulations.
PHILIPPINES (NGO)	<ul style="list-style-type: none"> - Companies need technical capacity and resources to scale up. To do this, they need access to the right suppliers of raw material alternatives. - For the government, it needs to incentivize companies who wanted to scale up reformulation by allowing them access to government platforms (i.e., bidding processes in infra projects). - Tax incentives for alternative suppliers will help bring down costs of non-lead raw materials.
USA (PRIVATE)	<ul style="list-style-type: none"> - Mobile lead safety training tools for workers who may incorrectly use common renovation work practices producing dust-containing lead products.

INDONESIA (NGO)	<ul style="list-style-type: none"> - To scale up the production of paint without added lead in my country, Indonesia, steps that need to be done are to prohibit the importation of lead-based pigments and driers, establish standards and regulations, and give the industry six months to one year to scale up their lead-safe paints productions, monitor it, and enforce the law. Yuyun - Nexus3, Indonesia - Based on the inputs and reflections shared by four paint manufacturers that joined the pilot reformulation in Indonesia, actions needed to facilitate scale-up are cheaper price/subsidies for non-lead pigments, regulation and education market/consumers demanding lead-safe paints.
ZAMBIA (GOVERNMENT)	<ul style="list-style-type: none"> - Passing and enforcing the law on lead in paint and labelling of paint as "lead-free".
PRESENTER AND COORDINATOR COMMENTS	<ul style="list-style-type: none"> - Maybe the technical guidelines and the summary documents (available also in French and Arabic) could be helpful to share with the industries in Morocco, as it provides information for step-by-step reformulation - We should remember that there is no safe level of lead exposure, and it causes severe, irreversible health impacts. - Governments can protect public health by establishing regulations. - The costs of exposure (due to the high economic impacts of IQ loss) far outweigh the costs of reformulation. - This information can be found in the WHO technical brief: https://www.unep.org/events/webinar/global-policymakers-webinar-eliminating-lead-paint-through-regulatory-action

QUESTIONS FROM PARTICIPANTS

RESPONSES.

TUNISIA (GOVERNMENT) Is there any idea about the difference in cost between lead additives and alternative raw materials? For countries that have experience? Is there a list of these alternatives?	<p>It depends on the specific raw material. Sometimes it is much more expensive, but often the same and even lower price.</p> <p>Alternatives to lead became expensive, but as the demand for such alternatives increases, the prices become more competitive and so companies, even SMEs, can undertake reformulation with an overall price increase minimized</p> <p>In general, lead-free formulations are slightly more expensive, but with the same quality.</p> <p>Here are the guidelines: https://www.unep.org/resources/toolkits-manuals-and-guides/lead-paint-reformulation-technical-guidelines</p>
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Poll 6 Results (N=23):

Which of the following actions has been done already to promote paint reformulation? (Select all that apply)

- Awareness-raising actions, 27%, (n=20)
- Capacitating SMEs/paint manufacturers with technical knowledge, 18%, (n=13)
- Drafting a law, 15%, (n=11)
- Dissemination of technical guidelines, 11%, (n=8)
- Passing a law, 11%, (n=8)
- Creation of a multistakeholder technical committee, 9%, (n=7)
- Visits to paint company, 7%, (n=5)
- Other (please add in comment), 3%, (n=2)

Responses in the chat:

TANZANIA (NGO)

- To facilitate scale-up - is market demand. After consumer awareness, we expect a consumer to demand lead-free paint

MADAGASCAR (GOVERNMENT)

- Awareness-raising actions
- Visits to paint company
- Creation of a multistakeholder technical committee
- Drafting a law
- Passing a law

Poll 7 Results (N=31):

What actions do you see as more significant to facilitate scale-up?

- Adoption of a regulation, 55%, (n=17)
- Technical support, 29%, (n=9)
- Awareness-raising, 13%, (n=4)
- Other (please add in comment), 3%, (n=1)

Responses in the chat:

MOROCCO (PRIVATE)

- Several points must be combined, put in place a law, and raise awareness.
- among manufacturers and the population to ask for lead-free paint and set up cheap formulations.

MADAGASCAR (GOVERNMENT)

- Adoption of a regulation

Lead in Paint Community of Practice membership breakdown					
Last updated: 22/06/2022					
		2020	New membership 2021	New membership 2022	Current membership
Region 	Africa	64	25	18	107
	Western European and Other Group	36	20	13	69
	Asia-Pacific	35	15	6	56
	Latin America and the Caribbean	25	10	5	40
	Eastern European	8	1	0	9
	Total	168	71	42	281
Sector 	NGO	64	24	10	98
	Government	56	25	14	95
	Private sector	15	12	9	36
	Academia	8	8	6	22
	Intergovernmental organization	25	2	2	30
	Total	168	71	41	281
Gender 	Female	94	38	20	152
	Male	74	33	22	129
	Total	168	71	42	281

Useful resources shared in this session:

- Reformulation is Entirely Possible: Summary of the Lead Paint Reformulation Technical Guidelines and How to Use this Information
<https://wedocs.unep.org/handle/20.500.11822/39989;jsessionid=19A308586AA8D8A2854F59A16ABA8E49>
- Project results in China, Jordan, Peru, Nigeria and Colombia – April 2021
<https://saicmknowledge.org/event/validation-workshop-paint-reformulation-guidelines>
- Lead in Solvent-Based Paints in Indonesia (2021 Study)
<https://ipen.org/documents/lead-solvent-based-paints-indonesia>
- Lead in Indonesia's New Enamel Household Paints (2015 Study)
<https://ipen.org/documents/national-report-lead-indonesias-new-enamel-household-paints>
- Lead in Indonesia's New Enamel Household Paints (2013 Study)
<https://ipen.org/documents/lead-indonesias-new-enamel-household-paints>
- Peru case study (from the Toolkit to Establishing Laws to Eliminate Lead Paint)
<https://wedocs.unep.org/bitstream/handle/20.500.11822/37023/LiPPeru.pdf?sequence=3&isAllowed=y>
- Cleaner Production Unit webpage:
<https://cp.org.jo/>
- Paint Reformulation Technical Guidelines
<https://wedocs.unep.org/handle/20.500.11822/39709>

LiP CoP: The Secretariat of the Strategic Approach to International Chemicals Management (SAICM) and the Environmental Health Division at the University of Cape Town (UCT) created this Community of Practice (CoP) to foster online discussions and address key issues on Lead in Paint (LiP) among stakeholders from governments, international organizations, industry, academia and civil society.

This CoP is contributing to the SAICM/GEF project on Emerging Chemicals Policy Issues Knowledge Management Component. This activity is supported by the Global Environment Facility (GEF) project ID: 9771 on *Global Best Practices on Emerging Chemical Policy Issues of Concern under the Strategic Approach to International Chemicals Management (SAICM)*.

If you have any questions or require clarification on this initiative, please contact the SAICM Secretariat at saicm.chemicals@un.org or UCT at uctcops@outlook.com.

Join the LiP CoP at: <https://saicmknowledge.org/community>
