SUMMARY REPORT

INTERNAL THEMATIC CONSULTATIVE AND BRAINSTORMING MEETINGS

switchasia SCP FACILITY

Funded by the European Union

Collaborations and synergies for sustaining the implementation of SWITCH-Asia Programme for a more impactful #WeSwitch focused on:

PLASTICS

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Dr. Arab Hoballah, Team leader of SWITCH-Asia SCP Facility acknowledged the distinguished contributors and welcomed all participants. The objective of the meeting is to exchange experiences and learn from each other – how plastics can and must play a key role in transitioning to circularity and Sustainable Consumption and Production.

Dr. Hoballah stated that production and consumption patterns are driving the global and local material use. Even though there are approaches and policies to support SCP, our economies remain in the "make-use-dispose" paradigm. The exponential growth of plastics makes this visible. The topic is of particular importance in Asia, where a growing middle class of consumers take up Western production and consumption patterns which today means more material input, more disposal – and more plastic.

At the moment, a lot of the focus in this discussion lies on marine litter and single-use plastic – this is an "end-of-the-pipe" perspective. But it is important to look at the whole system, where resource-efficiency needs to be prioritised in order to effectively tackle the plastic issue through improved awareness and innovation.

Clean-up drives and policies offer good communication opportunities on plastics, but they do not necessarily reflect the change needed: the need for efficiency, the need for innovation at local and regional level, involving all stakeholders including the private sector. Of course, government policies are important, but if the market is not prepared, if consumers' preferences and company solutions have not shifted away from plastics, a law is not effective: it tackles only one element, and not the whole system of plastic. Therefore, solutions lie in combining and scaling up different approaches, involving all stakeholders – some of which will be presented in this event and discussion. Dr. Hoballah concluded that it is important to identify those contributions that can be mainstreamed to achieve impactful solutions in Asia.

Mr. Luca MARMO, *Senior Expert, DG Environment, European Commission*, presented the European Commission's perspective and activities on plastics. He first pointed to the numerous challenges that plastics pose – from marine litter, to microplastics and nanoparticles. He emphasised the importance of solving the marine litter problem – both created by fishing gear and plastics that has mostly been carried by rivers to the sea. At sea, ecosystems are destroyed by entanglement and pollution, whereas small plastics particles are ingested by fish, ending up on consumers' plates. At the same time, solving these challenges provides the great opportunity to support "closing the material loop" and thereby contributing to the creation of a circular economy. As plastics is a fossil-based material, avoiding plastics, and prioritising reusing before recycling or incineration ("energy recovery)" also contributes to the fight against climate change.

The EU believes that a panoply of instruments is necessary going forward, from banning certain types of plastics and plastic products, to legislation covering design and use, to the use of market-based instruments. With its Plastics Strategy published in 2018, the EU has mandated that all plastics need

to be recyclable by 2030. To achieve this, the EU has been working with plastic producers along the whole plastic value chain. Its Circular Plastic Alliance demonstrates that the EU works with businesses to make this aim a reality. This includes extended producer responsibility (EPR), where producers pay for recycling and cleanup. The EU has practiced this for some time. However, there are unsolved issues remaining, like traceability and comprehensiveness of EPR schemes. The EU has also now banned those single-use products that are most found on its beaches. To curb plastics' growth trajectory, this wide array of instruments could and should also be used in Asian countries.

Globally, if current trends continue, plastic production will again triple by 2040. It is a trans-boundary issue because both plastics production and pollution are global in nature. Therefore, the EU seeks to contribute to a Global Plastics Agreement. The United Nation Environment Assembly in February 2022 would be the meeting where the global community can decide to start negotiations by establishing an intergovernmental networking committee on a new global plastic agreement. In particular, the upstream phase would be in focus, as downstream and waste aspects are already covered by other agreements. More than 100 countries in the UN are supporting this process in principle and launching the negotiations would be an important step.

Dr. Magnus BENGTSSON, *Expert, Enhanced Regional EU-ASEAN Dialogue Instrument (E-READI) Project*

Major trends and challenges in Asia and opportunities for action

Dr. Magnus Bengtsson presented the most common challenges around plastics in Asia – which could also be rephrased as opportunities for improvement. As the largest region in the world, its diversity means that solutions need to be adapted to the local context. He stated that the plastic challenge is seen predominantly as a waste or pollution issue, a "downstream" perspective, rather than a holistic view of the material, product design and use. It is important to ask "upstream", in the design phase, where plastic's unique properties are really needed and it is irreplaceable as a material. Many of today's use cases could also be substituted by other materials or systemic solutions, like reuse systems. Regarding recycling, a high quality is important in order to "close the loop" and make necessary plastics circular. In Asia, the recycling quota is overall low, and it is often of poor quality. This leads to more plastics being produced, ending up as litter or in landfills and thereby contributing to the growth trajectory of plastics. There is limited recognition and support of the informal waste recycling sector. Workers are often extremely poor and their conditions are challenging but only rarely are they recognized by the local municipalities or receive the support that they need. This minimises their potential contribution to circularity of plastics.

In terms of material, the substances used in plastics in Asia need to be addressed. Many of these substances are added intentionally to give plastics various properties, but they can be toxic to human health and nature. We tend to see plastics as inherently hygienic materials but there are thousands of chemicals of concern that are used in plastic material and currently there is very little recognition and discussion around this in Asia. Awareness of this urgently needs to be raised. There is also a limited understanding of the different types of bioplastics – whether biodegradable or made from biological materials or as blended materials. There are far too few incentives to really stimulate design for better products.

Governance issues include that the plastic industry is also seen as a source of economic growth and job creation and there is support to this industry provided, even though the problem of growing amounts of plastic is recognised – there needs to be more coherence in limiting the plastics problem. Tackling this is difficult as industries currently generate high profits on plastics and will resist these changes. Innovation and experiments are needed, while being mindful of "lock-in" effects of suboptimal solutions, like incineration – long-term sustainability must be the goal.

"As a vision for the future, I believe that many of present plastic products will be bio-based not fossil based, and powered by renewables. We will have phased out hazardous substances. We will design products to be durable and part of reuse systems or recycling whenever possible. This is supported by legal frameworks: there will be a business case to reuse and recycle effectively, the latter with a focus on high quality so that the materials can go back and replace new materials in a closed loop."

Mr. Muhammad Irfan TARIQ, *Director General (Environment & Climate Change) in the Ministry of Climate Change, Islamic Republic of Pakistan, and national Focal Point for the United Nations Framework Convention on Climate Change*

Mr. Tariq spoke about the multitude of challenges resulting from natural resource depletion and plastics pollution in Pakistan. As across the globe, Pakistan's natural resources are under extreme pressure and further threatened by plastic pollution. He also presented Pakistan's vision on plastics, and how it plans to join the global community in eliminating this menace for the country. The purpose of this shared vision is to innovate, recycle and create market for recycling plastic with cooperation between all key players in the value chain in the country.

The Ministry of Climate Change developed a Sustainable Consumption and Production Action Plan. As part of support provided by the SWITCH-Asia SCP Facility, research and analysis was conducted to suggest a set of options towards plastic pollution elimination.

Pakistan plans to adopt a circular economy underpinned by legislation and policies to operationalize the concept - also managing plastic pollution. Pakistan is not a key producer of plastic, yet the import of plastics has increased drastically. One important concept is extended producer responsibility (EPR), to reduce the burden on local governments and municipalities of Pakistan. It is important that importers and large corporations are legally bound to pay for any environmental externality, thereby encouraging the plastic industry to develop a business case prioritizing environmental conservation. To complement EPR, Ministry of Climate Change intends to work with the industry and partner organizations. Its priority is to transform their supply chain by rooting out plastic materials that can be avoided to support redesign of plastic products and packaging for greater durability, reuse and recycling. Further, it plans to encourage industry to recycle by boosting market demand through favorable legislation. The Ministry also seeks to provide incentives and tax rebates to relevant industries according to their performance.

Mr. Tariq further elaborated that Pakistan is already experienced in banning single-use plastics, where a ban in the Islamabad capital territory showed promising results, also with regard to population attitudes: more than 94% of surveyed participants supported the ban. Similar outreach programs are being planned all across the country based on these results. Learning experiences from the Islamabad experience included the importance of making sustainable options replacing plastics available and training SMEs in order to help upgrade to alternatives. Also, industry was encouraged with soft measures to take actions against plastics use voluntarily.

Now all these lessons learned can be transformed into a work plan - including a policy framework with immediate mid-term and long-term actions and targets. There will be prioritization of plastic prevention, and implementing partners will be identified to implement plastic waste handling and recycling. Accordingly, indicators for monitoring the progress are to be developed. These activities are based on previous interventions but one major lesson learned is that the government has recognized is that as plastic has to be eliminated, it cannot be done through one single measure. It requires a number of measures from the government and a whole-of-society approach.

Ms. Thuy Phuong NGUYEN, *SCP Expert, SWITCH-Asia SUSTOUR and Luang Prabang Handle with Care Grant Projects (Laos)*

Ms. Thuy Phuongh Nguyen contributed experiences from the SWITCH-Asia SUSTOUR and Luang Prabang - Handle with Care grant projects. Within the scope of Handle with Care, which ended in 2019 project, a comprehensive approach to single-use plastics in the tourist city of Luang Prabang was taken. First, the project promoted good environmental practices for local tourism businesses. Secondly, it promoted local handicraft and organic food as part of the tourism value chain. Thirdly, the project supported better management of cultural tourism as well as raising awareness for environmental issues in the tourism sector. To tackle plastics, a priority list of five most used disposable plastic items in tourism and hospitality businesses was developed. In Laos, these are plastic bottles, plastic bags, take-away containers, straws, and hotel amenities. In addition to reusable systems, like refill stations for water bottles, the project also promoted locally available materials as alternatives. For example, banana leaves have been used as a food packaging material for a long time, and bamboo sticks can be used as straws. Several local companies entered the market after awareness was raised, including for refillable glass bottles and takeaway containers made of bamboo bark. Through a "plastic free" certification scheme, the project incentivized business to reduce use of single-use plastic items.

Ms. Nguyen stated that it is important to pay close attention and look at the whole life cycle of plastic products. As an alternative to SUP some of the businesses sourced recyclable plastic, which is not necessarily a better option in Laos because there is no plastic recycling facility. Behavioral interventions are effective low-cost complementary solutions. For example, making eco-friendly options default like a "no straw" campaign has proven effective. Peer pressure is important – the more hotels were offering glass bottles, for example, the more likely were others to adopt the same practice. Last but not least, communication, policy-making and implementation are essential. It is difficult to convince businesses that they have a role to play in dealing with the plastics problem. Many believe that government legislation needs to come in and ban harmful plastics. But while rules and regulations are urgently needed, they alone are not going to solve the problem, especially in countries where regulation enforcement is known to be ineffective.

Dr. Abdullah NAZEER, *Project Manager, PROMISE grant project, The Maldives National University (Maldives, India, Sri Lanka)*

Dr. Nazeer stated that waste, and in particular plastic waste, is a huge problem for the Maldives and the entire region of the Lakshadweep Sea. Microplastics found on the beaches of the Maldives, Sri Lanka and India pose health risks to both marine animals and human beings and marine litter is a threat to the tourism industry. Plastics in this marine environment stems both from land sources of the three countries and beyond.

The objective of the project is to support Maldives, India and Sri Lanka in preventing leakage from land-based sources into the sea in line with the Sustainable Consumption and Production approach. In the Maldives, the government has committed to a phaseout of single-use plastics already, starting with first items in 2021. The project seeks to facilitate a regional dialogue between policymakers and representatives from the tourism industry, and support SMEs in implementing waste minimisation options. Events will engage with around three thousand participants from the three countries over the next three and a half years. It is planned to conceptualise and initiate a "Lakshadweep Zero-Waste Alliance" and also sensitise a wider stakeholder network about the approaches to plastics and waste prevention. The project was initiated with a big clean-up event at the beginning of this year.

Mr. Steven LONG, *SWITCH-Asia SCP Facility Assignment Expert, supported by Ms Loraine Gatlabayan, Advisor, SCP Facility.*

In its assignment carried out with Laos, the SWITCH-Asia SCP Facility provides support to the Ministry of Natural Resources and Environment of Lao PDR. The task is to develop a policy report focusing on single-use plastics and providing recommendations including regulatory economic information and supportive instruments. The assignment started last year and directly consulted with stakeholders. It developed different analyses, including on dumping and burning of single-use plastics, and provided scenario planning. It also shows how alternative packaging and other solutions can transform the current challenge. The assignment also provides support for the government to pursue the development of the national plastic action plan. Besides the work on policy options for the regulation of plastic use, the SWITCH-Asia SCP Facility also supports the development of an SCP roadmap through its Regional Policy Advocacy Component. Plastics will be a critical part of this roadmap.

The experience in Lao PDR is that there are different stakeholders that the assignment has brought together, from the national government to local governments, to retailers and other businesses - different partners can be involved. Equally, it is important to make consumers aware regarding their role to address the plastic challenge. Specifically, it is important to identify and adapt policies to the specific context in Lao. Policies that that may work in other countries won't necessarily work here, and it is important to consider Laos' place in regional supply chains. Enforcement capacity is also an important topic, where voluntary initiatives are promoted and gain momentum before shifting into legislation. Social considerations also play a role, where the assignment seeks to ensure that whatever policies are recommended, do not unduly impact the poorer parts of society.

Mr. Alvaro ZURITA,*Team leader, Rethinking plastics - Circular economy solutions to marine litter, GIZ*

Mr. Zurita presented the multi-country Rethinking Plastics project, which is financed by EU and co-financed by the German Ministry of Economic Cooperation Development. It started in 2019 and there is one more year of implementation left. In each country, the project works with a political partner like the Environmental Ministries and institutions that are related to the plastic or marine litter issue. Indonesia, Vietnam, China, Philippines and Thailand are the main project countries while in Japan and Singapore, some specific activities are implemented. In total, 24 pilot projects are being carried out across the project.

In Mr. Zurita's perspective, the original aim of EPR has not been met – as it was originally designed to trigger and incentivise changes in product design "upstream". Yet it now is often understood more as waste management contribution by producers, or "downstream" activities. Following both approaches, the interconnectivity of them becomes more obvious. One key aspect is the replacement of single-use-plastics with alternative materials, where a whole life-cycle assessment of those alternatives is necessary to understand their potential risks. In addition, EPR is now often narrowly focused on producers, while distributors are equally responsible for creating "linear" business models– for example, convenience shops often sell single products in plastic packaging, and because there are no alternatives, consumers are actually forced to buy these products.

Mr. Zurita also mentioned the topic of additives - where hazardous substances and chemicals are put into products, recycled products become equally toxic and with increasing material diversity, recycling becomes more difficult to handle. It is important to reduce and eliminate these substances from the system so that essentially the recyclability of products will be increased and their health and environmental impact reduced.

Replacing single-use plastic by other materials requires a life cycle assessment to ensure that the situation will not get worse from replacing materials. Mr. Alvaro also referenced the Montreal protocol, which he had worked on previously - about replacing refrigeration gases by non-ozone depleting substances. He recommended an international agreement on plastic as an integral part of addressing the plastic problem properly.

Ms. Soumya CHATURVEDULA, *Deputy Director of ICLEI*

Ms. Chaturvedula supported the significance of an impactful legislative national approach, mentioning at the same time the concurrent difficulties implementing them on a local and provincial level. While many stakeholders welcomed a "ban" by 2022 on single-use plastics proposed by the Prime Minister in 2019, the plastics industry has worked against it. India is thus experiencing difficulties to implement regulations for single-use-plastics for large businesses and multinational actors. A big problem regarding bans is making alternatives to plastic solutions available. Innovation is needed, and this needs to be incentivised and promoted.

More than 20 states and union territories have announced a complete or partial ban on single-use plastics and also labelling and markings for plastic producers. However, a coherent approach is missing or implemented only locally. While the Central Pollution Control Board governs nationally, much of the framework-setting and implementation work lies with state, by way of State Pollution Control boards and regional and city authorities also play an important role, as they actually manage the waste. Local bodies create awareness, provide the infrastructure, ensure that recycling industry works according to the frameworks, and monitor channelizing waste as well as the involvement of informal sector workers. India has a large informal sector, and while a majority of plastic waste is collected by informal sector workers, the actual recycling quota is low.

Solutions need to be developed at a municipal level, taking into account the specific challenges and needs of the region. By way of example, in the city of Hyderabad, it reviewed and assessed the status of existing solid waste management, and conducted a survey regarding formal and informal plastic waste recycling, including a detailed assessment of which resins and materials were most found. It also analysed feasible practices in support of "holistic plastic waste management", developing locally relevant strategies. This was all done in close consultation with stakeholders, including private sector and recycling association. As a final step, a Plastic Waste Management and an Action Plan was developed to better manage plastic waste – in it, it is recommended that by 2025, single-use plastics are reduced at source, and remaining waste is recycled by a quota of 100% by 2030.

Mr. Jed ALEGADO, *Senior Communications Officer, Break Free from Plastics Asia Pacific*

Mr. Alegado introduced the recently published "Plastic Atlas" by Break Free from Plastics Asia Pacific and Heinrich-Böll Foundation. In Asia, plastics is on a steep growth trajectory, with more than 100 petrochemical plants producing plastics to be opened in the coming years. This is not only a pollution problem, but this is also highly problematic in terms of climate impact – as a fossile-based material, its carbon footprint is considerable, and could reach 10% of the global total CO_2 emissions in the coming decades. In addition, plastic manufacturing plants also pose environmental risks – as demonstrated by the recent explosion of a plastics polymer plant in suburban Bangkok, which killed at least one person, injured many and led to evacuations of a residential area close by.

In the pandemic, investment into plastics has grown to USD 400 billion spent in on new plants and investments in coming years, compared to less than USD 2 billion designated for plastic waste treatment. Falling oil prices and lax legislation have made plastics recycling costlier than the production of new plastic.

It is important to reduce plastics and by "closing the tap" stop petrochemical expansion while being mindful that this is well-managed and alternative materials and employment opportunities are created. Companies need to invest and provide long-term solutions like refill- and reuse systems – for example, packaging and plastic free stores or deposit return systems. There are also solutions proposed like chemical recycling or waste to energy incineration, yet they do not reduce the plastic challenge but rather prolong it. Consideration of the full life cycle of plastics including chemicals and microplastics would prohibit such solutions. Finally, a global agreement on plastics would be really important for Asian countries to face the plastics challenge by way of an international agreement that can be adapted as national policies.

Mr. Feng WANG, *Program Officer, UN Environment Program (UNEP)*

Mr. Wang agreed on the equal importance of upstream and downstream solutions to tackle the plastic problem. It will be as important to find ways to reduce production and consumption and at the same time work on making remaining plastics less toxic and less complex – fewer types of polymers and less additives would also make recycling easier. Important is tackling reuse from a policy perspective by creating the right frameworks, which allow to rethink product design and also business models. One major issue is the price difference between subsidized fossil-based plastics and alternative materials. The root cause of exponential growth of plastic is because of the low and even subsidised price of oil. This makes a plastics product relatively cheaper compared to different alternatives, for instance, cotton, paper, glass and other materials. The external costs of plastic products should be part of their overall costs, so producers must think upfront about their extended responsibility. This is also why a lot of colleagues have mentioned extended producer responsibility because that's one of the financial instruments that require producers to think up front if they put products on the markets, and what are consequences of managing them afterwards.

He stated that with different financial instruments and tools from both policy, including taxes, as well as investment, this would support a market creation towards more circular products, not only plastics. There needs to be attention and support from both the government and the business for shaping this new market.

Mr. Wang concluded by stating that the previously mentioned global agreement on plastics is highly relevant. It is important to have a harmonized definition of the problem and take a more aligned approach. This will also provide momentum and raise awareness that this is a challenge that we face globally and it needs attention and collaboration among countries. The outlook that this could be tackled internationally is more positive than five years ago.

KEY ISSUES AND RECOMMENDATIONS BASED ON THE CONTRIBUTIONS AND ROUNDTABLE DISCUSSION:

- The plastics problem currently tends to be viewed as a waste or pollution issue, a "downstream" perspective, rather than a holistic view of the material, product design, use and profitability for producers. It is important to understand that focussing on plastic waste is "too late" – material alternatives and business cases need to be supported.
- Plastic production is still growing exponentially. Due to the pandemic, even more uses have been promoted by the industry. To limit its harmful impact, it is important to reverse this growth trajectory.
- One of the root causes of exponential growth of plastic is that the oil price is currently low, and sometimes even subsidized. It therefore makes alternative materials and recycling systems not profitable. As the external costs like environmental pollution are currently not priced, plastics is always a cheap option. This needs to change. More policy coherence by national governments committed to curbing plastics is necessary.
- Plastics need to be recognised as a climate change relevant material. As it is based on fossil oil and gas, it should be covered as important also in climate negotiations and national climate mitigation strategies.
- The substances used in plastics in Asia need to be addressed. Many of these additives are toxic chemicals, detrimental to human health and nature. Plastics is thought of as "inherently" hygienic, but this is not the case. Canada has recently declared all types of plastics as toxic.
- Material alternatives, reuse and recycling systems need to be assessed with a lifecycle-assessment approach. While there are no perfect solutions, it is important that alternatives to plastic do not cause more harm in other ways. For example, not all bioplastics have superior material characteristics.
- Plastics is a trans-boundary issue because both production and pollution are global in nature. Therefore, while national, regional and municipal action is needed, a global agreement on plastics is important to allow for alignment at international level.
- The plastic industry is still seen by many governments a source of economic growth and job creation and there is support to this industry provided. It is important to acknowledge that plastic alternatives (materials as well as systems) are also a source of employment, and they do not cause harmful impacts.
- Concepts like extended producer responsibility are helpful, but only as part of a panoply of measures at different levels that tackle the plastic problem, and full commitment by governments to coherently and comprehensively deal with the issue. It needs to be acknowledged that the plastics and fossil oil industry is an important and savvy player and lobbyist that seeks to keep its profit-making business cases around plastics in place.

CLOSING REMARKS BY ARAB HOBALLAH

Dr. Hoballah summarised the contributions by the speakers and panellists from the SCP Facility's perspective. He stated that the plastics problem globally and in Asia is undeniable and it needs to be addressed by engaging all stakeholders. In order to move forward, regulations and policies need to be enacted in all countries but clearly, implementing these is truly challenging. In Asia, involvement of informal sector workers is of particular importance. These workers need to be embedded into a new system so that they contribute effectively to the transition away from plastics.

Countries like Pakistan, Laos and others are developing legislation and policy frameworks. Looking for the right incentives, approaches like extended producer responsibility bring in the private sector. Companies also need technical support and financial support while considering the specificities of each local context. We have heard from the different presentations that there are a multitude of initiatives and examples implemented. We do not have one solution that fits all and even within a country, approaches, especially with regard to waste management, might differ.

Dr. Hoballah concluded by saying that not every solution will be perfect, but it is important to make progress in the right direction. For example, policy and design for plastics reuse is important, so that when there are no alternative materials available, plastics are made circular and sustainable. While "end of the pipe" and downstream solutions are important, Dr. Hoballah stressed that one needs to acknowledge the interconnectedness between upstream and downstream solutions and commit to systems thinking.

Dr. Hoballah closed the meeting by thanking all contributors and discussants. The meeting will serve as an input for a larger conference on plastics in Bangkok in March 2022.