The fifth area of focus for UN Environment is chemicals and waste. We aim at supporting the transition towards the sound management of chemicals and waste.

On chemicals, our work delivers on the Sustainable Development Goals 3.9, 6.3, 7a and 12.4.

On waste, we deliver on the Sustainable Development Goals 3.9, 6.3, 7a, 11.6, 12.4 and 12.5.
By June 2017, UNEP’s work on chemicals and waste has progressed, but not to the extent planned. Most progress has been achieved towards meeting the targets of Indicators EA A-i, B-i, B-iii, C-ii and Ciii.

Little or no progress has been made towards achieving the targets of Indicators EA A-ii, A-iii, B-ii, and C-i. Two of these four indicators relate to results that the business sector should have achieved with UN Environment’s support. Our efforts to engage with the private sector deserves significant upscaling.

Examples of June 2017 results achieved towards each Expected Accomplishment are presented in the slides 4 through 10.

**Funding continues to be earmarked mostly** to advance international policy consensus and partnerships in relation to the Minamata Convention on Mercury and the emerging issues of the Strategic Approach on International Chemicals Management, SAICM.

Concerning its implementation capacity, UN Environment has taken further action by **continuing to strength results-based management and implementation capacity**, and **mobilizing financial resources** for currently underfunded priority areas, which include country implementation support.
One particular area of work where UN Environment and countries continue to make considerable progress is the **phasing out of lead in paints**.
The **Vision** of our work on chemicals and waste is that, by 2030, the world has completed a successful transition to the sound management of chemicals and waste, contributing to sustainable development in its **three dimensions** – economic, social and environmental.

The diagram shows the **chain of results** from 2016 up to 2030. The **diagram in this slide** clearly shows that the programme addresses at least **nine Sustainable Development Goals**, having impact on issues like hunger, health, gender, water, cities, sustainable consumption and production, oceans, peace and partnerships for the goals.

The **2030 goals** are targeted by this programme by achieving **three Expected Accomplishments**: one on creating an **Enabling Policy Environment**, one on science and tools for **chemicals**, and a similar one for **waste**. Nine types of **Outputs** deliver on these Expected Accomplishments. They range from scientific assessments, to advisory services, capacity building, partnerships, and awareness raising. The Outputs and Expected Accomplishments also deliver impact on at least two **UN Environment Assembly Resolutions**: 1/5, and 1/2.
A big part of UN Environment’s policy work on chemicals focuses on mercury. Levels of mercury in open-ocean fish are increasing, at the same rate as the rise that occurs in mercury that has made its way to the ocean. Recent data show that mercury contamination has actually reached levels that would make certain fish unsafe for consumption and cause health concerns.

To address this challenge the Minamata Convention on Mercury was adopted in 2013, counting on 128 signatories.

As at August 2017, a total of 74 countries had ratified the convention, and have become a Party to the convention. Almost half of these countries, a total of 34, ratified the convention during 2017. The 74 countries that ratified the convention are indicated with a black dot in this map.

On the 16th of August the Convention entered into force, for which 50 ratifications were needed. Now, the first Conference of the Parties can go ahead! It will take place in Geneva during the week of the 24th of September.

In the mean time, a total of 54 initial assessments are underway or planned, with the aim to help countries to build their capacity and move successfully through the convention’s ratification process. To make this happen, UN Environment is working closely with the Global Mercury Partnership, the United Nations Development Programme, the United Nations Industrial Development

The significant rise in country ratifications of the Minamata Convention on Mercury over the first half of this year, has resulted in meeting the corresponding unit of measure of the first indicator target, set for December 2017, for Expected Accomplishment A, which helps countries establish the right enabling policy environment.
In October 2016, UN Environment significantly advanced work with partners to **recover the Earth’s protective ozone layer**. More than **150 countries** reached a monumental deal in Kigali, Rwanda, to **phase out Hydrofluorocarbons or HFCs** – greenhouse gases that can bring about climate change. These gases are widely used in **fridges, air conditioning and aerosol sprays**.

The **Kigali Amendment to the Montreal Protocol** is expected to remove the equivalent of about 70 billion tonnes of carbon dioxide from the atmosphere by 2050, hence addressing climate change.

During the first six months of 2017, a total of **four countries ratified** this important amendment. They are:

These Kigali Amendment ratifications also contributed to meeting the December 2017 target of the first indicator of **Expected Accomplishment A in the organization’s programme of work 2016-2017**.
Lead exposure is estimated to account for 0.6 percent of the global burden of disease, with the highest burden in developing regions. According to the World Health Organization, childhood exposure to this metal is estimated to contribute 600,000 new cases of children annually with intellectual disabilities. Researchers’ estimates of reduced cognitive potentials (or loss of Intellectual Quotient points) due to preventable childhood lead-exposure equal 98.2 million points in Africa, 283.6 million in Asia, and 24.4 million in Latin America and the Caribbean. This translates into economic losses of more than 900 billion US dollars around the globe (137 billion in Africa, 142 billion in Latin America, and 700 billion in Asia).

Today the main focus of UN Environment’s work with partners on phasing out lead, concentrates on banning leaded paint. During the first six months of 2017, three more countries reported that they had effectively adopted policies to put in place leaded paint controls. They are: India, Moldova and Tanzania. In doing so, these countries received support of UN Environment and the World Health Organization, through their joint Lead Paint Alliance.

This brings the global number of countries that have reportedly put in place legal and regulatory frameworks on leaded paints to 69 countries.

As a result, we have reached 66% progress towards meeting the biennial target set for December 2017 for this second unit of measure of the first Expected
Accomplishment indicator A of the Programme of Work on chemicals and waste.

At the same time, a total of 41 civil society organizations participated in the International Lead Poisoning Prevention Week held in late 2016 and reported their successes subsequently. These participating organizations are well spread across all regions. Please note that this specific outcome achieved by civil society organizations, results in a 93% attainment of the December 2017 target of the third indicator of Expected Accomplishment B on chemicals.
The first half of 2017 saw several country governments addressing priority waste issues, including their obligations under related multilateral environmental agreements such as the Basel Convention. They did so using tools and methodologies provided by UN Environment. These were: Moldova, Mongolia and Thailand.

Mongolia amended its National Law on Waste Management, while decided to implement a holistic waste management approach. Also, the Thai Pollution Control Department identified waste management targets to make sure it applied a results-based management focus with clear goals and targets. Moldova drafted a key Law on Waste and Chemicals. This progress however was less than our target in the programme of work. We had assumed that country level results on waste management would increase exponentially this biennium but instead progress at country level is at a gradual pace.

In order to ensure real exponential progress on this and other Programme of Work indicators, UN Environment will need to scale up its outreach and promote its existing products such as the waste management outlooks, tools and guidance, thus ensuring enhanced uptake and use of these high quality deliverables by governments, businesses and civil society organizations.
Globally, there is a need for **education and training in pollution prevention** and **sustainable waste management**. This would create the environment in which better waste management can occur, with the aim of ultimately improving the pace of uptake of waste management solutions.

With the aim to **train and educate top professionals** working in the waste management industry, UN Environment worked with universities and schools to provide the **Global Waste Management Outlook** and other waste management curriculum materials.

One highlight in 2017 was that **École Polytechnique Fédérale de Lausanne** in Switzerland used the **Global Waste Management Outlook** in its course on municipal solid waste management. The Lausanne Polytechnic School joined other universities that adopted modern waste management approaches in curricula, and that were reported in 2015 and 2016.

In this way, these universities and institutes of technology are being prepared to face future challenges in waste management in a successful and more impactful manner.
Challenges and Opportunities

**Challenges**
- Political commitment and support
- Reduced Environment Fund
- Project money mostly for activities
- Slow uptake of UN Environment tools

**Opportunities**
- First Conference of the Parties of the Minamata Convention
- Pollution Theme of Third UN Environment Assembly
- ‘Beyond-2020’ process of the Strategic Approach
- Increased interest of the Business Sector
- Circular Economy and Life Cycle approaches
- Nexus with Resource Efficiency and Climate Change
- Sustainable Chemistry

There are many challenges that we are facing that we can turn into opportunities to promote the sound management of chemicals and waste.

One challenge concerns the continued political commitment and support from governments and stakeholders to advance this agenda. Renewal of these commitments is essential for our success. This is of particular importance in view of the reduced Environment Fund money that is affecting our implementation capacity. At the same time, extrabudgetary funds are being raised that are often only available for project activities, not UN Environment staff time. To allow for full implementation of the programme plan, more unearmarked funding will be necessary.

Furthermore, this reporting period saw the relatively slow uptake of UN Environment tools by governments and stakeholders. While UN Environment believes that outreach efforts on existing and new tools should be scaled up significantly, the uptake of products provided by UN Environment and partners should happen faster as well.

There are a number of key opportunities in the near term. First of all, UN Environment, Member States and key partners and stakeholders will capitalize on the momentum created by the First Conference of the Parties of the Minamata Convention on Mercury that will happen in late September in Geneva. This first COP presents a unique opportunity to increase the pace of work on mercury.
We will also further build momentum around the inter-sessional process towards 2020 and beyond, that the Strategic Approach on International Chemicals Management, SAICM, is undertaking. This will be an opportunity to look beyond the horizon and develop the chemicals’ and wastes’ agenda towards 2030 in sync with the Sustainable Development Goals and the urgency to address issues around resource efficiency, climate change, and chemicals and wastes in a more integrated manner.

Secondly, the world should prioritize the sound management of chemicals and waste at the upcoming UN Environment Assembly which focuses on pollution and the nexus with health and the environment. The wise management of harmful chemicals and hazardous wastes is key to achieve the goals of the UN Environment Assembly including its High Level Segment.

There is also an increased global interest among stakeholders and in particular the business and finance sectors and consumer organizations, an opportunity to promote the circular economy, implement life cycle approaches, and boost sustainable chemistry approaches. Stronger engagement with the private sector will be key to our success.