EU-CHINA Workshop on Soil Pollution (27-28 February 2017)

Outline

This outline is for the China-EU Workshop on Soil: Policy, Science and Technology

Beijing

1. The Issue

Soil is the basis for 90 % of all human food, livestock feed, fibre and fuel. It supports human settlements and provides raw materials and groundwater. Soil is, however, increasingly contaminated. Today, soil pollution is a widespread problem of varying intensity and significance across the world, including in the European Union and China. The European Environment Agency estimates that there are between 2.5 and 3 million potentially contaminated sites in the European Union – a legacy of 250 years of industrialisation; of which about half a million pose significant risks to human health or the environment. According to an official study released in 2014, almost a fifth of China's soil is contaminated. There are **three million potentially contaminated sites** in the EU.

There is an urgent need to reverse this trend; Land Degradation Neutrality is one of the universal SDGs Target (15.3). At European level the Resource Efficiency communication and the 7th EAP have also provision on soil protection "By 2020 land is managed sustainably in the Union, soil is adequately protected and the remediation of contaminated sites is well underway" (7th EAP). Tackling soil contamination is not only beneficial for the environment but also for the development of bio-economy and the sector of eco-industries working on recycling brownfields. Indeed contaminated sites can constitute a serious risk for people's health, but their remediation can also be an opportunity for growth and jobs. The remediation of contaminated soils is a dynamic sector where the EU is leader. Some countries have already a mature and structured market with good innovation capacity.

China released its "Action Plan on Prevention and Control of Soil Pollution" on 31 May 2016. The new action plan requires that 90% of contaminated farmland be made safe by 2020, with an increase to 95 percent by 2030.

The Ministry of Environmental Protection will take the lead in implementing the plan. The emphasis will be put on establishing laws to monitor, prevent, and remediate soil pollution, and aims to incrementally improve soil quality across the country by 2050. Specifically, the plan aims to make 90% of polluted arable land safe for human use by 2020, and increases that target to 95% by 2030. MEP will cooperate with the Ministry of Land and Resources and the Ministry of Agriculture to implement a uniform monitoring system to track the soil quality of all regions across the nation.

The Action Plan is a response to a 2014 nationwide soil quality survey, which revealed contamination in approximately 19% of surveyed farmland, 10% of forests and 10% of grasslands across the country. The plan addresses existing contamination on industrial and agricultural land, and also sets forth protections for uncontaminated land. "A number of key measures are not currently addressed by the plan such as such as listing of priority sites, providing for an overall approach to evaluating and selecting clean-up measures, or defining

clean-up standards. These issues will need to be addressed in the future legislation called for by the Action Plan.

The Action Plan is consistent with goals included in China's 13th Five-Year Plan to clean up agricultural land and to reduce contamination from pesticides and fertilizers. The action plan is the government's third environmental action plan in recent years, with the first targeting air pollution (released in 2013) and the second targeting water pollution (released in 2015).

It is estimated the action plan could add 2.7 trillion yuan ($411 billion) to the nation's GDP and create around 2 million jobs. The Workshop will provide a platform to present recent developments including approaches and legal frameworks for soil protection. It will also be an opportunity to exchange information on innovative developments relating to the sustainable remediation of polluted soils. EU and Chinese approaches to soil monitoring schemes, identifying contaminated sites, remediating contamination, and addressing brownfield regeneration could be part of the discussions.

The EU has recently strengthened its provisions concerning the prevention of soil (and groundwater) contamination by industrial installations through its Industrial Emissions Directive. It could share its experience in the field of environmental liability, particularly land damage. Certain EU's Member States (e.g. Germany, the Netherlands and Belgium) have developed specific soil standards and/or put in place robust systems for the identification of contaminated sites. The European Commission in 2009 carried out a soil sampling campaign of 22,000 sites (agricultural, forestry and peri-urban land) throughout the EU in the so-called LUCAS survey. This exercise was reviewed in 2015 to allow a comparison of trends concerning for example heavy metals, carbon, and phosphorus.

2. Possible Objectives:

- To discuss regulatory approaches to address soil contamination in the EU and China; This could be at a more general level , or at a more technical level to address specific issues of interest to Chinese counterparts for the development of soil legislation at this moment in time.
- To exchange best practice on soil quality monitoring, on the remediation of contaminated sites and the regeneration of brownfields, and on the development of approaches for different types of site. The publication "Success stories of remediation of contaminated sites in Europe" by the EEA, EINET and the European Commission last year could be a very useful basis for this exchange.
- It may also be useful to take a broader look at specific rural or urban soil pollution problems, their causes and possible approaches including links to waste management and water and diffuse pollution caused by overutilization or use of pesticides for example.

3. Possible outcomes:

- Identification of key challenges in soil policy that could be taken forward under EU-China cooperation on environment;
- State of the art of technologies available for the decontamination of polluted soils;
- Exchange of experience on best practice in the monitoring and management of soil quality for different types of site
- Identification of best practices to regenerate brownfield sites as a way to mitigate the negative effects of soil sealing.
- Improvement of knowledge and dissemination, and exchange of information and best practices.
- If more useful, to address specific issues that concern Chinese soil legislation and allow discussion and sharing of experience between experts.

4. Participants:

The workshop will bring together as appropriate, policy makers, business, environmental NGOs, academia and other stakeholders. The setting can be an open workshop or a smaller closed door workshop as appropriate.