

# Politics



## Networking Meeting – Emissions Reduction in China’s Waste Management Sector

### 交流会 — 中国垃圾处理领域的节能减排

In China, there exists huge potential for greenhouse gas reduction in the waste management sector. Especially conventional waste treatment methods, such as landfills and incineration, need to be further improved. In recognition of these challenges, the Chinese government for instance has taken emissions from the waste treatment sector into account in its emissions trading pilot schemes, in regions such as Beijing, Guangdong and Chongqing (launched between 2013–2014). In light of these developments, it is of fundamental interest to learn more about waste-related mitigation projects in China and to discuss how these measures can contribute to sustainable waste management and achievement of China’s climate targets.

In this context, German Industry & Commerce Greater China Beijing, on behalf of the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety (BMU), on 22 May 2019, organized a Networking Meeting on the topic of “Emissions Reduction in China’s Waste Management Sector”. At the meeting, experts informed the over 30 participants about the potential for greenhouse gas (GHG) reduction in the Chinese waste sector and, in this context, assessed different waste disposing measures, offering suggestions for policy makers and other stakeholders.

At the beginning of the meeting, Nina Mitiaieva from Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) described the significant GHG emissions reduction potential in the Chinese waste sector, which in 2012 accounted for 158 million tons CO<sub>2</sub>e, or 1.3 percent of the total GHG emissions in China. Landfill and incineration, both of which are still regular practices for the treatment of municipal solid waste (MSW) in the country, accounted for 54 million and 14 million tons CO<sub>2</sub>e, respectively. After declaring its Nationally Appropriate Mitigation Actions (NAMAs) in 2010, the People’s Republic has set out to lower its CO<sub>2</sub> emissions by 40–45 percent based on 2005 levels by 2020 and by 60–65 percent by 2030. To meet these targets, ambitious action is required across all sectors, including waste management, for example by improving recycling rates and waste-to-energy processes.

中国的垃圾处理领域存在减少温室气体排放的巨大潜力。特别是传统的垃圾处理方法，例如填埋和焚烧，需要进一步改进。认识到这些挑战后，中国政府采取了相关措施，例如，将垃圾处理中产生的碳排放纳入碳交易体系，并在北京、广东和重庆等（于2013-2014年启动）地区进行试点。鉴于这些发展，进一步了解中国垃圾处理相关的节能减排项目，并探讨这些措施如何有助于实现可持续垃圾处理以及中国的气候目标，至关重要。

在此背景下，德中工商技术咨询服务有限公司北京分公司作为德国工商大会在华下设的服务机构，在德国联邦环境、自然保护与核安全部的支持下举办了一次以“中国垃圾处理领域的节能减排”为主题的交流会。在此次交流会上，相关领域专家向30多名与会者介绍了中国垃圾处理领域减少温室气体排放的潜力，并评估了不同的垃圾处理方式，为决策者和利益相关者提供了建议。

交流会开始后，来自德国国际合作机构（GIZ）的Nina Mitiaieva女士首先阐述了中国垃圾处理领域减少温室气体排放的巨大潜力：2012年废弃物处理领域二氧化碳排放量达到1.58亿吨，占中国全部温室气体排放量的1.3%。垃圾填埋和垃圾焚烧仍是中国处理城市固体废弃物的常规做法，分别产生了0.54亿吨和0.14亿吨的二氧化碳排放。自2010年启动国家适当减缓行动以来，中国政府计划到2020年将单位国内生产总值二氧化碳排放量在2005年基础上下降40% - 45%；到2030年下降60-65%。为达到这一目标，各个领域都采取了重要举措，包括垃圾处理领域，例如提高回收率和垃圾资源化。

2017-2022年，由德国国际合作机构和城市环境卫生协会共同执行的NAMA基金会支持项目——中国城市生活垃圾领域国家适当减缓行动项目，致力于加强城市生活垃圾综合管理水平。在此项目的框架下，苏州、西安、兰州、泰安和蚌埠五个城市经申报和评审被选为试点城市，它们将在垃圾处理领域

The China Integrated Waste Management NAMA Support Project (IWM NSP), which from 2017–2022 is being jointly implemented by GIZ and the China Association of Urban Environmental Sanitation (CAUES) aims to help close this gap. In context of the project, five demonstration municipalities, which were chosen in a competitive process (Suzhou, Xi'an, Lanzhou, Tai'an and Bengbu), are provided with the necessary support to increase effectiveness in waste management, for example by sharing technologies and best practices based on European experiences and through capacity building and policy advice. The overarching goal of the IWM NSP is to create an evidence-based comprehensive policy framework aimed at emissions reduction in the waste sector for implementation across China.

Following as the second speaker, Dr. Mao Da from the Rock Environment & Energy Institute (REEI) provided an overview on waste incineration and the Chinese carbon market. Dr. Mao pointed out that waste incineration, which remains a widespread practice, prevents China from reaching the Sustainable Development Goals (SDGs), of which at least eight relate to MSW management. Moreover, through incineration waste loses its quality as a reusable resource. Hence, waste incineration is unable to generate significant carbon emission reductions and lacks “additionality”. Instead of misallocating financial resources to these practices – renewable energy subsidies to waste incineration account for at least 1.5 billion CNY – the aim of China’s waste management strategy towards emissions reduction should be to minimise the generation of waste at the source and to divert materials for reuse, recovery and recycling in order to minimise waste disposal in the first place.

In the concluding session, participants discussed the methodology employed in the IWM NSP, current recycling practices in China and problems associated with waste incineration. Both experts agreed that there exists an “out of sight, out of mind” problem, as citizens often are not aware of the pollution caused by MSW. To address this issue, Dr. Mao suggested raising public awareness and the introduction of a clear timetable and volume cap on MSW. With regards to the inclusion of the waste sector in emission trading pilot schemes, Nina Mitiaieva highlighted that due to a lack of reliable data, which makes the quantification of emissions in the sector particularly difficult and because it is regarded as not being very emission-intensive, waste management is often not addressed properly. Nonetheless, with regard to the future development and fulfilment of China’s NAMAs for emissions reduction, the waste sector remains a key area of interest.

得到必要支持,以提高垃圾处理效率;支持包括基于欧洲经验的可行技术和最佳实践方法,能力建设以及政策建议等。这一项目的总体目标是建立一个以实证为基础的综合政策框架,以减少垃圾处理领域的碳排放,并在中国各地实施。



*Nina Mitiaieva from Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) and Dr. Mao Da from Rock Environment & Energy Institute (REEI) shared their insights*  
德国国际合作机构的Nina Mitiaieva女士与磐之石环境与能源研究中心的毛达博士在交流会上分享他们的观点

第二个报告来自磐之石环境与能源研究中心的毛达博士,他就垃圾焚烧与中国碳市场的概况进行了介绍。毛达博士指出,垃圾焚烧目前仍然是一种普遍做法,它将阻碍中国实现可持续发展目标,而在这些目标中,至少有8个与城市生活垃圾处理相关。此外,垃圾焚烧后将不能作为可重复利用资源。因此,垃圾焚烧不仅不能显著减少碳排放,还缺乏“附加值”。中国垃圾处理领域面向碳减排的战略目标不应是将财政资源错配给这些做法——对垃圾焚烧的可再生能源补贴至少占15亿人民币——而是应当从源头减少废弃物的产生,并对材料进行回收、再利用和循环使用,以最大限度地减少废弃物处置。

在交流会结束前,与会者讨论了中国城市生活垃圾领域国家适当减缓行动项目中采用的方法、中国目前的回收做法以及与垃圾焚烧有关的问题。两位专家都同意有一个所谓“眼不见心不烦”的问题——公众往往意识不到城市生活垃圾造成的污染。为了解决这一问题,毛达博士建议提高公众的认识,并在城市固体废物上引入明确的日程和数量上限。关于将垃圾处理纳入排放交易试点计划,Nina Mitiaieva强调,由于缺乏可靠的数据,对该领域的排放量进行量化非常困难,而且由于该领域的碳排放通常被视为不是非常密集,因此垃圾处理往往没有得到妥善处置。尽管如此,在中国为减少碳排放所启动的国家适当减缓行动项目的未来发展和实现方面,废弃物处理仍然是一个值得重点关注的领域。