



# Waste containing nanomaterials: Issues and possible work under the Basel Convention

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# The Basel Convention on the Control of Transboundary Movements of hazardous wastes and their Disposal

## Three pillars:

- **Minimize the generation** of hazardous wastes in terms of quantity and degree of hazard;
- **Control transboundary movements** of hazardous wastes and other wastes (conditions and the PIC procedure);
- Promote the **environmentally sound management** of hazardous wastes and other wastes

## Wastes covered

- **Wastes** are substances or objects that are disposed of, intended to be disposed of, or required to be disposed of by national law
- **Hazardous** wastes
  - Annex I (waste streams, waste constituents) and Annex III (hazardous characteristics), as further elaborated in Annexes VIII and IX
  - Defined nationally
- **Other** wastes
  - Annex II

## Work to promote the environmental sound management (ESM) of hazardous wastes

- Technical guidelines specific to waste streams or to disposal operations

<http://www.basel.int/Implementation/Publications/LatestTechnicalGuidelines/tabid/5875/Default.aspx>

- Framework on ESM and tools for its implementation

<http://www.basel.int/ESMFramework/tabid/3616/Default.aspx>



# Possible work on waste containing nanomaterials

- Decision BC-13/17:
- Secretariat to prepare:
  - Report on **issues related to waste containing nanomaterials** and **options for possible work** under the Basel Convention within its scope
  - Compilation of information on existing activities that address such waste
- To be considered by Open-ended Working Group at its 11<sup>th</sup> meeting (Geneva, 3-6 September 2018)

## Benefits

- Stimulate discussion of nanomaterials and their potential effects on human health and the environment in the international arena
- Promote consideration of nanosafety throughout the lifecycle: what happens to nanomaterials after disposal?

## Issues to be explored

- Obtaining a clear picture as to which waste containing nanomaterials are arising and the quantities that need to be managed
- Understanding how waste containing nanomaterials need to be managed to ensure ESM
  - Hazardousness of waste containing nanomaterials

## **Key conclusions from Nanomaterials in Waste Streams (OECD,2016)**

- Possible sources entering waste treatment facilities are known but types and quantities of nanomaterials in waste streams unclear;
- State of the art facilities may be able to capture a large share of nanomaterials in waste – more research needed on wide range of nanomaterials
- Fate of nanomaterials when sub-standard waste treatment technologies are used (uncontrolled landfills) unknown
- Nanomaterials may affect effectiveness of some waste treatment processes



## Options for work under the Basel Convention?

- Enhance data collection on the generation of waste containing nanomaterials
- Hazardousness of waste containing nanomaterials
- Better understand disposal routes
- Effectiveness of disposal technologies



Parties and others are invited to provide information on existing activities that address waste containing nanomaterials

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**Thank you**