

# Six reasons why The world needs responsibly manufactured antibiotics

High concentrations of antibiotic residues in factory wastewater can lead to hotspots of resistant bacteria. This means that industrial pollution has an overproportionate effect to other sources of antibiotics such as misuse and overuse, on promoting resistance. A risk that comes without any benefit and that is easily avoidable.

## Safeguard the environment

Discharge from antibiotic manufacturing causes severe environmental pollution in rivers and other water sources, potentially adding to the risk of antimicrobial resistance (AMR). It also affects irrigated agricultural fields and life cycles of aquatic species.

## Fight superbugs

AMR occurs when micro-organisms evolve over time and stop responding to medicines. The ones that develop such resistance are called “superbugs”. AMR is now a leading cause of death worldwide. 1.2 million deaths were recorded in 2019 alone.

## Sustain healthcare systems

According to WHO, infections like pneumonia, tuberculosis, gonorrhoea, and salmonellosis are becoming harder to treat as more bacteria turn resistant to existing antibiotics. There is a demand for new antimicrobials, which comes with added responsibility.

## Reduce economic risks

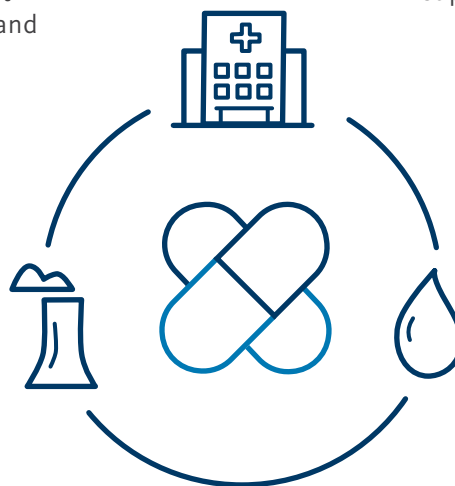
In addition to health risks, ineffective antibiotics create a load on the economy, and risky business for pharmaceutical supply chains. AMR is causing prolonged patient care in hospitals which is resource intensive for governments.

## An easy win

The problem of industrial pharma waste running into rivers can be avoided at the source. Increased technological know-how make it possible to effectively treat effluents inside factories.

## There is no other option

Antimicrobial resistance is such a great cause of concern that it has been called as a silent global pandemic. It is a shared problem requiring synergised action and responsibility across the table – of which the way antibiotics manufacturing is managed, has great potential to improve.



### Who is responsible, anyway?

The need for responsibly manufactured antibiotics is a two-way street. Demand drives how companies choose to manufacture. If governments standardise the practice of safe environmental disposal, companies will adhere, thus driving the cycle of demand for improved practices. But how can we ensure that all parties understand what is needed?  
Are there even standard practices to follow?

**The Responsible Antibiotics Manufacturing Platform led by SIWI in partnership with others, is breaking the stalemate by creating a shared understanding among all stakeholders.**