9. Private-sector initiatives

Important private-sector initiatives have emerged to tackle global AMR. In 2020, Investor Action on AMR (IAAMR) was launched as a collaboration between the Access to Medicine Foundation, the Farm Animal Investment Risk and Return (FAIRR) Initiative and the UK Department of Health and Social Care to galvanise investor efforts to tackle drug-resistant infections. Supported by 22 investors and representing more than US\$ 14 trillion in combined assets, IAAMR aims to cut the excess use of antibiotics in the food supply chain and in healthcare. To safeguard society, economies and the long-term value of investment portfolios, IAAMR encourages investors to formally assess and integrate AMR risks, opportunities and impacts using the holistic and multisectoral One Health approach. It explicitly discusses the adverse impact AMR will have on global financial markets, economic stability and long-term value generation, as well as the need for global cooperation, sustained funding and innovative solutions.65

Ahead of the UNGA-HLM on AMR in September 2024, IAAMR issued a public investor statement, endorsed by 80 investors, calling on global leaders to take decisive and coordinated action to curb AMR to safeguard global health, economic stability and financial markets.⁶⁶ IAAMR, together with the MSCI Sustainability Institute and FAIRR, published Health and Wealth: The Investors' Guide to Antimicrobial Resistance (AMR), A Growing Global Health Crisis in August 2024.⁶⁷ This guide provides an introduction to the investment risks and opportunities associated with AMR. It focuses on the livestock, food, pharmaceutical, biotechnology, life science and managed healthcare sectors. It sets out a view on AMR risk and the necessary robust response by the environmental, social and governance (ESG) community.

The pharmaceutical industry has launched its own AMR initiatives. The AMR Industry Alliance (AMRIA) is one of the largest private-sector coalitions aimed at providing sustainable solutions to AMR, with more than 100 biotech, diagnostic, generic and researchbased pharmaceutical companies and associations joining forces. It spans the commercial manufacturing of antibiotic pharmaceutical active ingredients and drug products, representing around 30 per cent of human antibiotic production.

In 2018, the AMRIA launched the Common Antibiotic Manufacturing Framework, which proposes a riskbased approach to assessing and controlling antibiotic manufacturing waste streams. In 2022, to formalise the framework, the AMRIA published its Antibiotic Manufacturing Standard, comprising numerical emissions standards at the point of production. These aim to reduce the risk of antibiotic resistance and aquatic ecotoxicity developing in the environment as a result of the manufacture of specifically human antibiotics. In 2023, the British Standards Institution (BSI) developed a certification scheme to verify that antibiotics are manufactured in conformance with AMRIA standards. This provides guidance to manufacturers in the global antibiotic supply chain to ensure that their antibiotics are made responsibly to minimise the risk of AMR in the environment.⁶⁸ This is a voluntary scheme for the sector, though the certification is required to meet various national healthcare-system antibiotic-tendering environmental compliance requirements and will ultimately prepare firms for the national regulations that may come into force several years down the road.

 $^{^{\}rm 65}\,See$ Investor Action on AMR (n.d.).

⁶⁶ See Investor Action on AMR (2024).

⁶⁷ See FAIRR (2024).

⁶⁸See AMR Industry Alliance (2022).

The US Food and Drug Administration, the European Medicines Agency (EMA) and national legislation currently have no formal regulations governing antibiotic concentration limits in pharmaceutical wastewater, for example.⁶⁹ India attempted to draft such regulations, but withdrew them, while Sweden is currently contemplating their introduction. In September 2024, the WHO published its first ever guidance on antibiotic pollution from manufacturing. The new guidance on wastewater and solid waste management for antibiotic manufacturing provides human health-based targets to reduce the risk of the emergence and spread of AMR and to address the risks to aquatic life caused by all antibiotics intended for human, animal or plant use. It covers all steps from the manufacturing of active pharmaceutical ingredients and formulations to finished products, including primary packaging.⁷⁰ WHO member countries may develop national standards based on the guidance in the coming years.

The UK NAP on AMR (2024-29) refers to the environmental impact of antibiotic manufacturing and the need for standards such as the AMRIA Antibiotic Manufacturing Standard and the BSI Minimised Risk of AMR certification.⁷¹ The UK National Health Service (NHS) announced in August 2024 that pharmaceutical companies applying for a contract through its antibiotic subscription model would have to prove they were meeting responsible antibiotic manufacturing standards through BSI Minimised Risk of AMR certification against the AMRIA Antibiotic Manufacturing Standard.⁷²



- ⁶⁹ See Wellcome and Boston Consulting Group (2022).
- ⁷⁰ See WHO (2024).
- ⁷¹See Government of the United Kingdom (2024).
- 72 See Dall (2024).