

Product environmental stewardship

Product life cycle

We are committed to ensuring effective environmental management of our products, from pre-launch through to product end-of-life. We strive to address all environmental impacts from our product value chains. We look for opportunities, wherever possible, to close the production loop and ensure our products are contributing to the circular economy.

Disposal

Our approach

Patient education programmes to raise awareness on the importance of responsible disposal of medicines and pilot projects to support recycling

2018 highlights

- Pilot project completed for mail-back of inhalers in US
- **9,000** patients engaged
- **1,000** recycled inhalers

Patient use

Our approach

Patient education programmes to raise awareness of medicines and pharmaceuticals in the environment programmes to understand the environmental risks of our products

2018 highlights

- Appropriate environmental risk assessments submitted with all new marketing applications and post-approval queries addressed
- Ecopharmacovigilance programme successfully delivered, with no new environmental product risks identified



Active pharmaceutical ingredient (API) production and formulation

Our approach

Green chemistry – developing manufacturing processes that use less energy and water, as well as fewer and less environmentally impactful chemicals

2018 highlights

- Significant decrease in process mass intensity (PMI) – our metric for resource efficiency in API production – and chemical solvent tool shared with all pharmaceutical companies
- **65%** of projects had an environmental assessment
- **22%** decrease in PMI across product portfolio

Device production

Our approach

Environmental sustainability assessments (ESAs) ensure selection of most sustainable materials

2018 highlights

- **3** ESAs in 2018
- **30%** reduction in plastics and packaging waste achieved by new autoinjector
- **55%** reduction in carbon footprint by switching to renewable electricity

Packaging

Our approach

Better packaging solutions that reduce resource consumption and waste – decreasing size of packaging, switching to recycled materials and using materials that are readily recyclable

2018 highlight

- **30%** less packaging waste will result from the launch of new tablet blister laminate

Distribution

Our approach

Improved transportation solutions – switching from air to sea, which is less carbon intensive and pollutes less

2018 highlight

- **62%** of freight (tonne-km) transportation was converted from air to sea

See the [Pharmaceuticals in the environment](#) section for more information on our API discharges