

Takeda's Position on Water Stewardship

Summary

Water is a vital resource that enables Takeda to achieve our vision of discovering and delivering life-transforming treatments guided by our commitments to patients, people and the planet. Globally, water sources are increasingly stressed by human activity, most notably population growth, industrialization, pollution, and climate change. As a result, the lack of access to clean water is an increasing threat to the health and development of communities around the globe.

Our values of Takeda-ism - Integrity, Fairness, Honesty and Perseverance, require that we take action to protect this critical resource. We understand that it is our responsibility to protect surface and groundwater resources through water conservation efforts and responsible facility operations. However, we know that these efforts alone will not ensure the long-term viability of the water resources upon which we rely. Accordingly, we are taking a context-based approach to understand and address the specific burdens affecting water sources in the watersheds where we operate, and in our value chain – prioritizing and focusing our efforts and resources on locations we have identified as highly water-stressed.

Protecting water resources is a complex challenge. Strains on watersheds are both global and local in nature and, in most cases, have developed over many years. However, we continue to study regional water stressors and develop appropriate mitigation strategies to address them. We also realize that successful remediation strategies must ultimately include concerted engagement with other stakeholders in these affected watersheds and a collective commitment to meaningful actions mutually beneficial to the area in which our patients and employees live, the communities where we operate, and Takeda itself.

Background

Takeda recognizes that the health of people and our planet are inextricably linked. Water scarcity, and the lack of access to clean water, cause unnecessary human suffering and death, impact production of our food supply, and affect the planet's ecosystems. ^{1,2} Population growth, along with greater urbanization and climate change, continue to drive an increasing demand for water, further stressing critical water supplies. ³ Based on accepted water stress models, water crises are expected to be among the greatest risks faced by the public over the next 10 years, as water demand will exceed the capacity of water supplies in a growing number of areas. ^{4,5} Increasing pressure on water resources represents a potential risk to our operations and the communities in which we operate.

Takeda's Perspective

As a science-driven global company, Takeda is aware of the critical role that water plays in realizing our vision to discover and deliver life-transforming treatments. The need for water is inextricably woven into our supply chain and is critical to the health of the communities in which our patients and employees live and work. Takeda believes that we have a clear duty to manage this resource in a responsible and transparent manner, and in accordance with our corproate values. Water stewardship has been identified as one of the 11 most relevant human rights for Takeda, and our commitment to uphold human rights in the communities in which we operate is embedded in our Code of Conduct. Our Human Rights statements can be found <a href="https://example.com/here-needed-communities-need

Despite the significant growth planned for our business operations, we are committed to taking actions to minimize our water footprint and ensure that our operations do not negatively impact the water resources in communities where we operate. These actions include:

- Setting and achieving water reduction targets across our network by investing in water efficiency projects, and adopting water treatment and reuse technologies.
- Identifying and addressing possible impacts to water resources during our product development and project approval processes by incorporating water withdrawal assessments, determining the potential impacts from wastewater emissions and requiring wastewater treatment technologies in order to eliminate or reduce impacts.
- Operating and maintaining our sites in a manner that addresses our wastewater and storm water discharges which ensures we do not degrade local water resources.

¹ World Wildlife Fund (WWF). (n.d). Water Scarcity. https://www.worldwildlife.org/threats/water-scarcity

² United Nations Children's Fund (UNICEF). (n.d). Water, Sanitation and Hygiene (WASH). https://www.unicef.org/wash

³ Intergovernmental Panel on Climate Change (IPCC). (2018, October). *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C*. https://www.ipcc.ch/sr15/

⁴ World Resources Institute (WRI). (n.d). Aqueduct - Water Risk Atlas. www.wri.org/applications/aqueduct/water-risk-atlas/

⁵ World Economic Forum. 2018. The Global Risks Report 2018, 13th Edition. http://www3.weforum.org/docs/WEF_GRR18_Report.pdf

We take a context-based approach to water stewardship. We strive to understand watershed-specific stressors and manage associated risks in regions in which we have water-intensive operations. To develop this understanding, our process includes:

- Identifying our site locations most affected by water stress by cross-referencing projections from two globally-accepted water stress models (WRI Aqueduct (Current Risk and 2030 RCP 8.5) and WWF Water Risk Filter (Basin Risk)).
- Supplementing the water stress model data with site-specific surveys to further validate the models
 or identify potential discrepancies.
- Investigating the specific water source issues for sites identified as facing "high" or "very high" stress. The assessments include trending of water availability, quality, accessibility, political/regulatory aspects, infrastructure, and reputational elements, followed by an overlay of the sites' water reliance to determine associated water risk.
- Developing risk mitigation plans to address watershed-specific issues including expectations for enhanced water conservation and engagement with key community partners.

This methodology is updated as needed and reviewed on a periodic basis to ensure that we continue to focus our efforts on the most impactful areas and to proactively limit our water risk exposure.

Conclusion

Takeda recognizes the critical need for responsible water management and works to address water scarcity and water quality while minimizing our impact on water supply in the communities in which we operate. We are committed to constructive and responsible water stewardship and will continue to work within our operations to innovate and minimize our water footprint. We will also work within our communities to protect this vital resource so that it remains available to all.

About Takeda Pharmaceutical Company Limited

Takeda is a global, values-based, R&D-driven biopharmaceutical leader headquartered in Japan, committed to discover and deliver life-transforming treatments, guided by our commitment to patients, our people and the planet. Takeda focuses its R&D efforts on four therapeutic areas: Oncology, Rare Genetics and Hematology, Neuroscience, and Gastroenterology (GI). We also make targeted R&D investments in Plasma-Derived Therapies and Vaccines.

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