

Designing A Hard Water Urban Community

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Theme Communities

Summary

Even though hard water is common in waterworks around the globe, it still causes issues including but not limited to mineral buildup (which leads to increased spending for infrastructure), increased electricity use and amplified water use. When considering the creation of a sustainable society, hard water is a disadvantage, especially for hard water communities inside mainly soft water countries. For these communities, in the status quo, hard water can be softened through water softeners. However this method is expensive and requires large-scale construction work if it were to be implemented, which calls for immediate action. In our research paper, we will explore the possibilities of a society more open to the options of water softness. We will use real-life examples of struggling cities with hard water in Japan, a mainly soft water nation, collect information from these communities and realistically perform thought experiments and calculate specific aspects of hard water. Through this research, we expect to find ways to cut water costs and also work towards building a sustainable environment where water is not put to waste.