

**Cold or Hot Wash:
How technological choices lead to cultural change and potential
increase in clothes washing energy use in China**

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ABSTRACT

Usage pattern of clothes washing (and clothes washers) are strongly related to local cultural practices. Such practices have lead to the development of distinctive clothes washing technologies in US, Europe, and Japan. In the emerging markets such as China, several types of technologies often co-exist. Some use less energy but more water (the impeller type), and some use more energy but less water (the horizontal axis type, often with built-in water heaters). The competition of different technologies is thought to lead to better consumer choices. However, it could also lead to changes in clothes washing habits – from cold to hot wash, and therefore to much higher energy use. This paper examines the standard development process in China, the largest appliance producer and market in the world, to illustrate that adoption of foreign technologies and technical standards, if not carefully calibrated to the local cultural practices, could have unintended consequences for energy use and environment.