Household Water Treatment and Storage (HWTS) for Disaster Relief and Development Programs

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THE CHALLENGE
A lack of compelling products

- Previous commercial water filters cost too much and were too complex.

- The best NGO filter was cheaper and simple to use—but sold poorly due to its undesirable appearance, fragility and low flow rate.

- Market demand and distribution presents a challenge because target consumers are poorly educated, often hard to reach, and low income.
PATH’s strategy to raise the level of competition
Create technical and commercial essentials for market entry
Provide at no-cost to companies big and small
RESULTS
**What is on offer?**

- **Field tested gravity water filtration device** – lowest cost, functional, resilient, compact consumer ready packaging
- **Fast flow, reliable, rugged, ceramic filter** – lowest cost technology to improve water quality and deliver health benefits
- **Optional activated carbon filter** – further improves potability, removing color, odor and some chemical impurities
- **Optional “brominator” attachment** - delivers maximum performance, through controlled release of Bromine (a chemical similar to chlorine) at very safe levels. Device meets the highest rating of the WHO, NSF, and other international standards

- Performance verified at independent test laboratories
- “Development” model - product specifications based on independent 9 month field testing in 170 households in Kenya and Haiti
- “Disaster Relief” model – ongoing independent field trials in Kenya, Somalia and OPT
ImerPure™ Performance

- Imerys water filter has continuously demonstrated the microbial reduction as per specifications.
- Flow rate of water has been 2-5X times faster than any of the ceramic-based water filters in this price range.
ImerPure™ Kenya Field Trial Summary

- The majority of users reported they have enough information to use and maintain the filter (99%), and think that it is easy to use and maintain (89%).

- 100% of respondents planned to keep using the filter and would recommend it to others.

- Overall, 89% of respondents reported liking both the taste and smell of the filtered water.”
ImerPure™ Price and Performance

- Depending on raw water composition, consumer behavior and cartridge design, filter life has been rated between 1800L and 5000L.
- Assuming a family consumes 15L water per day equals a lifetime of between 100 and 340 days depending on the cartridge selected.

Based on a 5 year lifespan for the device, and filter replacements gives a total family cost for improved water from $0.04 per day.
### Transfer Pricing to Development & Disaster Relief Agencies

<table>
<thead>
<tr>
<th>Annual Purchases (no. of units)</th>
<th>Filter Housing (no cartridge) ($/unit)</th>
<th>GOOD Cartridge ($/unit)</th>
<th>BETTER Cartridge ($/unit)</th>
<th>BEST Cartridge ($/unit)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Ceramic</td>
<td>Ceramic &amp; Brominator</td>
<td>Ceramic &amp; Brominator &amp; Carbon</td>
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<td>0-10K</td>
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<td>10K-100K</td>
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- Indicative pricing is EXW Gujarat Plant, India, exclusive of any sales or export taxes.
- Imerys has a global logistics network and can provide distribution services to in-country warehouses.
  Delivered pricing available upon request.