Water Liberation Prize @ Humanity+

Bryan Bishop
bryan@humanityplus.org

Kartik Gada
kartik_gada@yahoo.com

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http://gadaprize.org/

Overview

This document defines the Water Liberation Prize concept and makes an argument for Humanity+ to host the cash prize, organize/rally the judging pool, and accept/receive donations to the cash prize pool.

Public-facing text

At least 2 billion humans, or 30% of humanity, do not have access to clean drinking water. This includes 40% of the world's children under the age of 15. A lack of access to clean water is the root cause of multiple problems, from fatal conditions like dehydration and diseases such as cholera and dysentery to the indirect costs of lost productivity. That this most basic of problems still affects such a large percentage of humanity demands a solution that can overcome traditionally existing obstacles, such as a lack of rainfall, irrigation, and access to electricity. An incentive-driven approach to the invention of such a self-reliance device at suitable cost targets would yield the maximum benefit.

A device available for under $5, that can produce enough drinking water for a single adult, would cause a net annual economic benefit of $500 for the recipient in the economy that they presently reside in. The $500 estimate is the sum total of disease reduction, death rate reduction, and productivity increase that access to this water would result in. These gains would be cumulative for each subsequent year as well. Lastly, such a device would enable human settlement at greater distances from traditional water sources, as long as atmospheric humidity was above a certain level. Clearly, the $5 water purification device is a very compelling product for a humanitarian organization to distribute en masse.

The winner of the Water Liberation Prize of up to $50,000 will be the first person to invent a device that is either solar powered, manually cranked, or otherwise not dependent on the existence of an electrical grid, can produce at least 4 liters of potable (drinkable) water per day, either condensed from the air (as measured in approximate 50% ambient humidity) or filtered through a nanomembrane, and can be mass-produced (as demonstrated by a pilot run of no less than 100 units) for a cost of less than $5 per unit. The filter should be washable and re-usable, without requiring a periodic supply of new filters, as the device may be used in areas without access to a suitable distribution channel.

The prize will be awarded on December 31, 2015, by a panel of judges.

Setup

For Humanity+, this prize represents an additional technology development competition to help promote transhumanist development. Where the terms of the prize itself differ from the RepRap prizes previously established at Humanity+ is where the Water Liberation Prize does not

specifically seek to engender open source collaboration. As such, it is an experiment in prizes for Humanity+.

Management of Funds

Specific banking details may be decided by the Treasurer prior to enabling over-the-web donations. Because the Water Liberation Prize concept was first announced at the Foresight Institute, and because public announcements have already made it widely known, the public value of the Water Liberation Prize shall be $50,000.

In the event that $50,000 has not been raised for the Water Liberation Prize by the award date, Humanity+ will award the amount raised towards the Water Liberation Prize to the winner as determined by the panel of judges.

A running meter of funds raised will be kept on the gadaprize.org site so that participants are not surprised in the event of total funds not being raised. The meter should be dynamically (not manually) updated in real-time as donations come in. Donation streams, ideally, will come from private donors as well as Facebook Causes (which takes 5%) as well as a number of other platforms that don't need to be specified upfront.

Humanity+ will not take any percentage of the funds raised towards the $50,000 balance for this prize for any reason, including "administrative overhead". The selling point is that 100% of the money that goes to Humanity+ goes to the prize fund.

Judging

Judging will begin 90 days before an award must be made for the Prize.

Based on the feedback from the panelists, Humanity+ will make a decision as to the authenticity of the entry, whether it has been conducted in the spirit of the Prize, and whether or not criteria has been sufficiently met (based on the expert review). The winning entry will be announced and somehow written up either through a press release or blog post by Humanity+.

There will be no physical on-the-ground judging of prize entries. However, judges will use whatever materials they find necessary from the full contents of each submission, such as videos, photographs, schematics, documentation, etc.

The judging panel pool is a list of individuals who are qualified to do the judging and have offered their services foregoing the opportunity to win the Prize. Humanity+ will make any judge changes public through the web or other means. Originally the Prize identified and collaborated with a potential set of judges and at this time they are:
     --?? Need to confirm

Judging will begin 90 days (2015-10-02) before the listed award date of the prize (2015-12-31).

Timeline

2015-10-02 - Prize entry submission deadline & judging begins
2015-12-31 - Prize award date & announcements

Prize Criteria / Terms & Conditions

The nature of the competition:
- The winner will be selected based first on meeting specification and requirements, and secondly on how much beyond the specifications the entry goes (particularly in the case where the Prize receives multiple potential winning entries). For instance, if two projects are submitted, where both meet all of the criteria for a winning prize entry, the one that excels the most beyond the definition of the criteria will be the most likely to win the prize. Of course, in the case that two qualifying entries both exceed expectations, judges will determine which one exceeds expectations the best. In the case of no entries exceeding criteria, the judges will make a recommendation as to whether or not either the entire prize should be awarded, or a portion thereof specifically to some team or entry or component project, or a recommendation to Humanity+ to extend the effective dates of the competition. Judges will be the ones to determine which entry is best.
- Judges make no distinction between entries submitted by individuals or by teams. Forming teams is perfectly acceptable.
- Submissions do not have to be open source.

Participation requirements:
- All entries must be submitted by the submission deadline (2015-10-02) to prize@gadaprize.org. An entry can be either solely the development repository (with plain text or HTML documents to explain what's going on) or a compressed archive (.zip, .tar.gz, .tar.bz2) of the development repository plus other materials, like videos demonstrating performance. The development repository must have all relevant schematics, source code, files, etc., and reasonable installation instructions for the judges to compile code or render images or otherwise make use of the resources. It has to work. There is no requirement for the software provided with the entry to be 100% cross-platform compatible and 100% bug free, but in general code has to compile, and ultimately the judges will rely on the principle of reasonable doubt. Because of the non-open-source nature of the competition, it is reasonable to request judges to sign NDAs.
- Participants may submit as many entries before the deadline as they want, but they must clearly identify whether or not the submission replaces a previous submission (i.e., maybe it's a new version), or if it's an entirely new submission. Judges reserve the right to ask questions about any submission prior to and (even more likely) after the submission deadline.

Contacts & Personnel

Bryan Bishop <bryan@humanityplus.org>
Kartik Gada <kartik_gada@yahoo.com>