



Application Form

The Alliance for Green Heat
Updated November 8, 2012

This application is designed to give the Judges enough information to select up to 16 finalists that they think will bring innovative, clean and efficient stoves to the Decathlon. The application consists of four parts, sections A, B, C, and D. The Judges will also be looking for innovation that lowers the price of a clean stove, makes it easier to operate or has features that will motivate consumers to trade in an old stove for a new one. In addition, Judges are looking for diversity of stove designs that could include masonry stoves, natural draft stoves that require no electricity, highly automated stoves, etc.

A working stove or prototype is highly encouraged but not required, particularly if you or your company or institution has not built a stove similar to the one you are proposing. Also, testing based on an accepted national test method of emissions and efficiency is encouraged but not required, particularly if you or your institution or company has not built and tested a similar stove. The Challenge is seeking stoves with emissions under 1 or 2 grams an hour and efficiencies over 75 or 80% that have innovative features to help the appliances work in the field as they did in the lab. A stove that can maintain no more than 2 grams an hour with a variety of wood size and moisture and little or no action by the operator may be favored by judges over a stove that emits 0.4 grams under ideal conditions but is not tolerant of variable wood characteristics or an inattentive or untrained operator.

Text, images and any other material submitted in connection with this application will not be publicly released unless your Team/Entry is selected as a finalist. The Organizers are committed to helping teams maintain intellectual property rights and will work with all teams towards this end. As stated in Section 7.3 of the Rules, we will release a paragraph (Section A.1.) and an exterior photo (Section B.2.) of all finalists. All applicants will receive written feedback from the explaining why their stove was or was not selected as a finalist.

We have provided word limits to most of the questions. The entire application should not exceed 15 pages, not including photos, diagrams and charts. You must use 12-point type, double-spaced, and 1-inch (or metric equivalent) margins. The maximum word count for each section is a suggestion. It is acceptable to use more words for one or two sections provided that the narrative part of the application is within 15 pages.

Applications are due by midnight, Eastern Standard time, December 20, 2012.
Judges will select finalists by January 31, 2013.

A. Overview

1. Please provide 1. Name of team captain or contact person, 2. Phone, 3. Email, 4. Website, 5. Company or institution name, 6. Address and 7. Name of stove.
2. Description of the stove (max 200 words). This will be publicly released if you are selected as a finalist.
3. What are the key unique or innovative features of the stove? (If there are more specific features in the stove that you want to share with the Judges, but not have released publicly if you are a finalist, you can describe them here.) (max 200 words)
4. Team values and goals. What are underlying values of the team? What motivates you? (max 200 words)
5. Design philosophy. What are you trying to convey? What does/will the entry look like? (max 100 words)
6. Is this stove on the market and if so, where? (max 25 words)
7. Has the stove been built yet? If it is not completed, what elements are still under construction or being modified? (max 75 words)
8. Do you already have the financial resources to complete the stove? If not, please explain how you will secure the resources and funding needed to complete the stove and bring it to Washington in November 2013. (max 200 words)
9. If any company or companies sponsor your stove, please list them.
10. Team organization. Who contributed to the concept, design and construction of any elements?
11. Provide short biographical background of key team members with emphasis on experience relevant to stove design and manufacture. (max 100 words per person, max 8 people)

B. Drawings and Photos

1. Please provide up to 3 design drawings for your stove or prototype that show a cross-section of the stove, an exterior view of finished product and any other drawing that would help judges assess the stove. Files may be submitted in PDF, GIF, JPEG or PNG (180 PPI or above).
2. If your stove or prototype is sufficiently complete, please provide up to 3 digital photos of it. (180 PPI or above)
3. A video or animation of the stove or prototype is also admissible in addition to the photos and drawing.
4. Please provide up to 4 digital photos of the people in the Team. If a group photo of the Team is not possible, please provide individual photos of key team members. Photos of the team that also show a bit of the factory, lab or other context are encouraged. For proper credit, photographs should

indicate name of photographer and date and place taken. (Photos should be 180 PPI or higher.)

C. Stove Description

1. Innovation (max 400 words)
 - a. What are the key innovative features of your design?
 - b. Why are they innovative?

2. Market Appeal (max 400 words)
 - a. What features make this appealing to consumers?
 - b. Does this stove reduce the opportunity for operator error? If so, how?

3. Affordability
 - a. How much are the approximate material costs for this stove (not counting labor)? (max 25 words)
 - b. If you can, please consider providing a line-item budget of cost of materials and components in the stove. (This is not required.) (max one page)
 - c. If this stove has been on the market, what is the retail price? If not, how much do you expect this stove could be retailed for? Please provide any assumptions you are making to arrive at this figure. (max 100 words)

4. Emission Reduction Strategies: (max 500 words)
 - a. How do you know that this is a very clean stove? If you have a working stove or prototype, please describe any emissions testing that you have performed or have had performed for you. Please include the name of the testers or the testing facility. (Prior testing is not required but is strongly encouraged as it may be difficult for the judges to assess how competitive the stove will be.)
 - b. What emission reduction strategies did you use?
 - c. Does this stove have features that will help mitigate emissions if loaded with large and/or unseasoned wood? Please describe.

5. Efficiency Maximizing Strategies: (max 500 words)
 - a. How do you know this is very efficient stove? While not required, if you had a working prototype, please describe any efficiency testing that you have performed or have had performed for you. Please include the efficiency test method that you used. Feel free to attach your calculations on a separate page with any charts and tables and diagrams.
 - b. What efficiency maximizing strategies did you use?

D. Stove Specifications

1. Heat output (max 300 words):
 - a. What is the volume of the firebox in cubic feet? (The minimum firebox size requirement has been dropped.)
 - b. Was BTU output tested or calculated in any way? If so, how and what were results?

2. Please provide: 1. Weight or estimated weight of stove or prototype, 2. Dimensions or estimated dimensions, of stove or prototype, including firebox dimensions, 3. Electricity requirements (if applicable).

(end)