



Challenge Rules

Updated on May 2, 2012. Note that in Section 11 (c) (1) the BTU output requirements were removed and a minimum firebox size of 1.5 cubic feet was added.

- 1. Rules:** These rules represent the sole rules of the Wood Stove Design Challenge organized by the Alliance for Green Heat (“the Challenge”). No oral or other unofficial communications are binding. However, there may be clarifications issued periodically at <http://forgreenheat.org/stovedesign/rules.html>. If anyone submits a question that requires any level of clarification, it will be answered in writing on the website and all registered teams will be notified. Send inquires to challenge@forgreenheat.org.
- 2. Terms:** The Alliance for Green Heat is hereinafter referred to as the “Organizer.” Entrants or participants in the Challenge are hereafter referred to as “Teams.” Teams may consist of a single individual or company, or any group of individuals, institutions, or companies except accredited wood stove test labs. The work submitted by each Team in connection with the Challenge is hereafter referred to as “the Team Entry.”
- 3. Registration**
 - a. Teams must register no later than October 1, 2012, unless they obtain a waiver from the Organizer.
 - b. Teams are encouraged to register their intent to participate as soon as possible. Registering will enable potential partners and sponsors to contact them, and for the Organizer to relay any relevant updates.
 - c. Teams can register here www.forgreenheat.org/challenge/register.
- 4. Entries**
 - a. Any Team or any company can submit no more than two (2) entries. A separate application is required for multiple entries.
 - b. Teams involving a university or college must have a faculty sponsor.
 - c. All Team Entries must be in English.
- 5. Technology eligibility**
 - a. Team Entries must use cordwood as fuel. The use of pellets or other densified fuel is not allowed. Small amounts of gas or electricity to assist combustion is allowed.

- b. Technology may already be on market, about to come to the market or a prototype in development.
- c. The Team Entry must be for a fully functioning stove and not an accessory or retrofit device.
- d. Teams may adapt existing stoves. However, to the extent that the existing stove is protected by intellectual property rights, Teams must obtain the written permission of the company who produced the existing stove. Pursuant to section 7(c) below, the Organizer shall not be liable for any claims by third parties relating to the Team Entry.

6. Sponsorship

- a. The Organizer does not have funding for teams at this time and teams have to cover the costs of participation through sponsorships or other means.
- b. To support individual teams with in-kind donations, cash contributions, or other resources, please [contact the Teams](#) directly, contact the Organizer or fill in the form available here: <http://forgreenheat.org/stovedesign/sponsor>.
- c. Team sponsors may be recognized with text, logos or both. The Organizer shall have the right to approve of size and placement of sponsor trademarks or logos as used in connection with the Challenge. Teams shall not have the right to use the Organizer's trademarks, other than as provided by section 6(c), below.
- d. Team websites must include the logo of the Challenge. The Organizer has the right to review and approve use of the Challenge logo.
- e. The Organizer may help, where reasonably appropriate, to identify sponsors and partners for teams.

7. Legal

a. General

- i. Employees and the immediate family members of the Organizer and the judges, as well as their parent companies, subsidiaries, representatives, are not eligible to enter the Challenge.

b. Ownership of Intellectual Property

- i. To the extent that the Team Entry is subject to intellectual property protection, the Organizer agrees that Teams shall retain all such rights, and the submission of the Team Entry does not give the Organizer any right, title, or interest in such intellectual property rights, other than as described in section (iii) below.

- ii. Teams shall have the right to use, release to others, reproduce, distribute, and publish the Team Entry outside the scope of the Challenge.
- iii. By submitting the Team Entry, Teams grant the Organizer, and others acting on its behalf, including but not limited to *Popular Mechanics*, a royalty-free, nonexclusive, irrevocable, worldwide license to use, display to the public, and prepare derivative works of the Team Entry in connection with the Challenge. Included within the scope of this license is the right of the Organizer to publish, distribute and display information, photos, drawings, or other images of the Team Entry for use in connection with the Challenge. The Organizer agrees that it shall not publish information regarding detailed specifications and plans for the Team Entry, and shall only use such information as is reasonably necessary in connection with the Challenge. If the Organizer needs to provide more detailed information or images, it shall consult with the Teams.
- iv. By submitting the Team Entry, Teams represent and warranty that the Team Entry is an original work of authorship, and that the Team Entry does not infringe the intellectual property rights, including any patent, copyright, trademark or other proprietary rights of any third party.
- v. The Organizer is not responsible for any claims or disputes between individual members of a Team regarding the ownership of the Team Entry or the content within the Team Entry. The Organizer may disqualify any individual or Team, without recourse and in its sole discretion, if any such claim or dispute arises.

c. Protection of Intellectual Property Rights

- i. The Organizer is committed to protecting the Intellectual Property rights of Teams entering the contest. No image, drawing, diagram, photo or details will be publicly released without the consent of the Team, except as provided in subsections (1) through (3) below. The Organizer shall not make public any information about a Team Entry that is not selected as a finalist. However, since part of the purpose of the Challenge is to educate the public about how clean stove technology works and why judges award prizes to certain Teams, Teams must be willing to allow certain general information to be released, as follows:
 - 1. The Organizer will not make public any information about a Team Entry that is not selected as a finalist.

2. The Organizer can publish a photo or drawing of the exterior of stoves that are selected as finalists along with a descriptive paragraph about the stoves. A general cross section drawing of finalists will be released with permission of the Team. The photo or drawing and the descriptive paragraph will be supplied by the Team.
3. Stoves selected as finalists that appear in the Decathlon will be third party tested for efficiency and emissions and such data will be made public during and after the Decathlon. Stoves that win one of the prizes must also provide a cross section diagram for publication.

d. Indemnification

- i. The Organizer shall not be liable for any claims or actions brought by third parties against Teams arising from or related to the Team Entry or a violation of these Rules, including but not limited to third party claims of intellectual property infringement. Teams shall indemnify, defend, and hold the Organizer harmless and free from and against any and all claims, losses, damages, costs, judgments, expenses, or liabilities (including reasonable legal fees) made by third parties against the Organizer and/or incurred by the Organizer arising out of or related in any way to the Team Entry. The Organizer shall have the right to select and retain counsel of its own choosing.

8. Dates and Deadlines

- a. Teams must register at www.forgreenheat.org/stovedesign/application no later than October 1, 2012, unless they obtain a waiver from the Organizer.
- b. Applications must be submitted by 11:59pm, Eastern Standard Time, Thursday, December 20, 2012. The application consists of drawings, a narration and supporting materials and does not require a prototype. Applications should be detailed enough to convince the judges that the stove or prototype is innovative and capable of very clean and efficient operation. More detail will be available on the application form that will be made available by Friday, March 30. Applications should be submitted to challengeapplications@forgreenheat.org. Receipt will be promptly acknowledged. Only electronic applications may be submitted.

- c. The judges will select finalists by Thursday, January 31, 2013, and invite them to bring their stove or prototype to the Challenge for final judging and public display in October or November 2013.
- d. Prizes will be announced at the conclusion of the Decathlon in November 2013. The exact date of the Decathlon and the location on the National Mall will be announced by November 30, 2012.

9. Judges

- a. A panel of up to 10 Judges will be assembled to judge the Design Challenge. Judges cannot be an employee of a wood stove manufacturer or a Team. If a Judge has even a remote relationship with any Team, they must disclose it and they will be recused from voting on that Team's entry.
- b. Judges can be nominated by Challenge Partners and Supporters or by the general public. Nominations should be sent to: challenge@forgreenheat.org
- c. The Judges will include representatives of some of the Partner and Supporter Institutions as well as wood stove experts, technology experts, combustion engineers, air quality experts and consumer advocates.

10. Judging process

- a. The Judges will review Team Entries twice. The first will be in January 2013 to assess the electronic applications and select the finalists. The second will be in November 2013 to assess the stoves or prototypes and select the winners from the pool of finalists. Eight to twenty finalists may be chosen.
- b. The initial application, due on December 20, 2012, will specify what information and images should be submitted. That application will be available on March 30, 2012. When selecting finalists, the Judges will consider technical innovation and design, along with evidence of the Team's ability to complete the project and bring it to the Decathlon in Washington. Other factors such as geographic and technological diversity may be considered for the benefit of the program.
- c. Finalists will be invited to bring their stoves or prototypes to Washington, DC and Judges will inspect the operation of the stoves over a several day period. Stoves will be operated and tested by third party experts designated by the Organizer and provide data to the Judges.

11. Decathlon Scoring

- a. The Judges will assess each Team Entry and determine, in their sole discretion, which Team Entry best addresses the Challenge guidelines. The Judges have absolute and sole discretion to determine the selection of finalists and

prizewinners. In the event that a Team Entry is identical or similar to another Team Entry, the Judges reserve the right, at their sole discretion, to either score one Team Entry higher than the other or to choose one or both of the Team Entries as a finalist or prize winner of the Challenge. The Organizer has discretion to undertake the judging and testing process in the manner it deems necessary for the purposes of the Challenge.

- b. The Judges will assess one to ten points for a maximum of 50 points in the following categories. The design that achieves the highest number of points wins the Grand prize.
 - i. Innovation (10 points). Judges will look for innovation, which could come in the form of simplicity, complexity, news ideas or old ideas implemented and combined in new ways.
 - ii. Market appeal and ease of use (10 points). Judges will look for how appealing the stove is to consumers, ease of use, aesthetics, etc. This involves features that may engage or help the consumer burn cleaner, maintain the stove and chimney better, not require (or allow) the consumer to adjust controls, etc.
 - iii. Affordability (10 points). This part of the scoring will be done objectively by a third party expert cost estimator, who will assess the cost of the materials and components of the stove. R&D, labor and other costs will not be evaluated.
 - iv. Emissions (10 points). This part of the scoring will be done objectively by third party experts. Judges will use data provided by the experts.
 - v. Efficiency (10 points). This part of the scoring will also be done objectively by third party experts. Judges will use the data provided by the experts.
- c. In addition to these 5 areas that will be judged, Team Entries must
 - i. Have a firebox that is at least 1.5 cubic feet. The reason behind this is that we want stoves that can be the primary heat source for at least a 1,500 square foot home.
 - ii. For safety reasons, not have the surface temperature of the connector pipe exceed 1,000 degrees Fahrenheit (537 degees Celsius) at any point.

12. Testing

- a. The Challenge puts a premium on clean operation as stoves are used in the real world, meaning: (1) with cordwood, (2), with wood that is often greater than 20% moisture content and (3) with absent or unskilled operators. The Challenge is intended to assess stoves that may be able to mitigate the results of an absent or unskilled stove operator and the use of unseasoned wood.

- b. The Challenge is designed to maximize participation and minimize cost by not requiring third party emission and efficiency testing in advance of the Decathlon. Instead, the Organizers will hire third party experts from one of the EPA accredited test labs to do on-site efficiency and emissions testing. Efficiency will likely be tested with a portable gas analyzer made by a company such as Testo. Emissions will be tested by a smoke spot test.
- c. Each stove will be subjected to multiple efficiency and emission tests each day over a period of at least 3 days. Results will be posted at the end of each day next to each stove.
- d. A third party expert will provide cordwood and be in charge of loading the stoves, in consultation with the third party emission and efficiency expert.
- e. Stoves can be tested using three different batches of cordwood ranging between 15 and 30% moisture content. Exact moisture content used each day of testing may not be made public until the week of the Decathlon.
- f. Teams may not touch the stoves during the testing. Stoves that require manual adjustments of air, bypass dampers, etc. will be done by third party experts, as instructed by the Teams. Once testing begins, each Team will designate one of their members to interact with the third party experts.

13. Prizes

- a. Grand Prizewinner will receive a \$25,000 cash prize and their design will be covered in *Popular Mechanics* magazine. The Grand Prize will be awarded to the Stove that receives the highest score of all 5 categories (up to 50 points).
- b. Two to five Second place winners will split the \$10,000 second prize pot. It is the prerogative of the Judges in consultation with the Organizer to determine which of the following prizes will be awarded, but in no case will it be less than two. A stove can win two prizes, including the Grand Prize and a second prize, or two second prizes. The second prizes will awarded based primarily on a single one of the five scored categories:
 - i. Innovation
 - ii. Market appeal and ease of use
 - iii. Affordability
 - iv. Emissions
 - v. Efficiency
- c. Winners will be covered in *Popular Mechanics* magazine.
- d. The Organizer in consultation with the Judges may establish a “People’s Choice” award that does not carry a cash prize.

- e. All federal, state, local, municipal, income, and other taxes (if any) are the sole responsibility of the winners.