Posted April 11, 2012 Highlights of the Review of the 2011 Clean Energy Prize Conducted by Eric Grimson

This document summarizes the full review, which is not being made public due to MIT's adherence to the Family Educational Rights and Privacy Act, a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. The public release of this summary has been approved by the affected students.

The MIT News Office has posted news of this summary on its site.

Introduction: The MIT Clean Energy Prize is a venture creation competition intended to encourage innovation in the energy space, specifically with regard to clean energy. It is supported primarily by the Department of Energy and by NSTAR. Although it is run by a group of students, it bears the MIT name and brand and is thus associated with MIT. The 2011 competition awarded first prize to CoolChip Technologies, a team lead by William Sanchez, Steven Stoddard and Daniel Vannoni.

Process: This review was conducted to clarify the facts behind the CoolChip submission to the Clean Energy Prize, especially how CoolChip presented intellectual property during the competition, and to determine whether they violated competition rules. Because questions were raised concerning CoolChip Technologies' public presentations, these issues were also reviewed; however, the review's primary focus was on the competition itself.

The review process included interviews with the CoolChip founders, with faculty, staff and students involved in the Clean Energy Prize, and with staff from Sandia National Laboratories (the owner of one piece of intellectual property underlying CoolChip's submission). It also included a review of CoolChip's written submission to the competition, and the competition's Rules and Eligibility and Compliance Statement.

Summary of findings and recommendations:

- 1. In written submissions and oral presentations during all stages of the judging process, Cool-Chip clearly identified a central technological component of their plan as having been invented by a researcher at Sandia. The CoolChip submission referenced a second technical component, which it clearly stated was invented by an MIT team; this invention was presented as a potential entrepreneurship opportunity during an MIT class. People present during judging confirm that CoolChip clearly identified the owner(s) of its technical elements. CoolChip's written submission also clearly identifies the IP source.
- 2. In both written submission and oral presentation, CoolChip indicated that they had either acquired an option to license the technology (MIT invention) or were in the process of acquiring rights to the technology (Sandia invention). While the description of the acquisition effort may be open to interpretation, specifically as to how close it was to completion, this phraseology is consistent with that used by other participants. When queried by the judges, CoolChip clearly described the licensing process and their current status within it.

- 3. An August 28, 2011 article in the *Chronicle of Higher Education* implies that CoolChip deliberately claimed ownership of technology that they did not invent. Within the competition, this implication is not correct. It is contradicted by the written submission and oral presentations made during judging. Thus the review does not support the charge that CoolChip inaccurately claimed to have invented technology actually created by others, nor that they inaccurately claimed IP licensing rights to technology. While CoolChip could have been clearer in their submission, for example by clarifying their description of the status of licensing negotiations, and by explicitly identifying the source of images used in conjunction with product descriptions, their representations were not deliberately misleading, and CoolChip consistently identified the source of each invention.
- 4. The issue of whether CoolChip violated the conditions of the Clean Energy Prize competition was considered against two specifications: The rules concerning IP, and the compliance statement signed by participants. For the 2011 competition, these two rules were not completely in alignment. The IP rules imply that the business plan and supporting material must be the creation of the participants, but the underlying technology need not be, so long as licensing agreements are in place or under discussion. While the compliance statement can be seen as implying a more stringent condition on originality, when read in light of the IP rules it can also be seen as requiring only that the team have permission to reference the technology, even if licensing rights have not yet been secured. Based on interviews during the review, it appears that the understanding of the conditions of the competition, shared by competitors and judges, was that of the IP rules definition. Under that interpretation CoolChip was not in violation.
- 5. While CoolChip did not violate the rules of the Clean Energy Prize competition, and while throughout that competition it identified the source of the intellectual property, during public presentations after the competition CoolChip did not appropriately cite the source of the IP. In several public presentations, including media interviews, the source of the invention was not made clear and an impression is given that CoolChip either invented the device in question or held the patent rights. These events include use of images from Sandia reports in presentations and on the CoolChip website, and the display of a prototype device similar to the Sandia device. The CoolChip website was modified immediately after Sandia officials expressed concern that it could be read as implying a licensing agreement not in existence. This appears to be due to a miscommunication or misunderstanding. During CoolChip's discussions with Sandia, they were informed that they could not imply any relationship with or endorsement by Sandia until after a bidding process for the technology was completed. CoolChip interpreted this to mean that they should not refer publicly to Sandia, lest it be seen as an endorsement; thus in private presentations to the competition judges and officials they made clear the Sandia relationship, but in public presentations they did not refer to Sandia. They believe this is what Sandia required; when Sandia officials clarified their expectations, CoolChip modified their web site and changed their public presentations. While apparently due to a misunderstanding, CoolChip should have recognized that their interpretation of Sandia's request was unusual, and sought clarification.

Conclusions:

1. CoolChip did not violate the rules of the competition. In written and oral presentations, Cool-Chip identified the inventor of the devices, and stated that they had or were in the process of acquiring licensing rights.

- 2. MIT needs to do a better job ensuring that entrants to the Clean Energy Prize, and other student run competitions, understand ethical issues concerning intellectual property. MIT students interested in entrepreneurship must understand that when presenting business ideas, they should consider whether the originators of IP would be comfortable with how their work is presented. MIT has already begun working with the leadership of these competitions to ensure that MIT entrants are educated on this issue.
- 3. The Clean Energy Prize rules need clarification. The competition rules and the compliance statement should be better aligned; indeed such refinement of the rules has already taken place for this year's competition. Nonetheless, the understanding held by the organizers, judges, and participants was that the rules document governed submissions; under those rules CoolChip was in compliance, as the business plan was their creation and they were in the process of acquiring IP rights to property referenced in that plan.
- 4. CoolChip was misleading in some of its public presentations of its business plan and associated technology. It should have cited the source of materials used in public presentations and should have sought clarification on this presentation given the unusual understanding they had of the process. However, CoolChip and Sandia have apparently now resolved the issue over Sandia's concerns regarding the way in which CoolChip described Sandia technology in public presentations.