ANNOUNCEMENT

MAX TECH & BEYOND

DESIGN COMPETITION FOR ULTRA-LOW-ENERGY-USE APPLIANCES & EQUIPMENT

Funding for Faculty-led Student Teams at U.S. Universities (AY 14/15)

Lawrence Berkeley National Laboratory's (LBNL's) Energy Efficiency Standards Group, with support from the U.S. Department of Energy (DOE), Office of Energy Efficiency and Renewable Energy, Building Technologies Program, is pleased to announce the fourth year of the *Max Tech and Beyond Appliance Design Competition*—driving energy efficiency innovation in appliances and equipment and supporting the development of the next generation of efficiency-minded engineers and entrepreneurs.

The competition supports student design teams at U.S. universities to design and test prototypes that will sharply reduce energy use or cut the cost of producing ultra-efficient appliances and equipment used in and around buildings, easing their acceptance in the marketplace. Ultimately, the competition aims to leverage American ingenuity to develop ultra-low-energy-use technologies that will be ready for market in less than 5 years.

Projects targeting any and all stationary energy end uses—residential or commercial—are welcome. Proposals cannot focus on mobile sources, building design, or energy generation, although they can incorporate building-integrated design and integrated renewables. The design teams can create prototypes that reflect new efficiency design concepts, that combine existing best practices and existing or new technologies into a single prototype, or that exploit hybridization efficiencies. Teams with successful prototypes will be assisted with market development, including being sent to a green tech entrepreneur workshop to develop business pitches and foster contacts with venture capital.

Proposals must provide a strong argument for how a prototype could be expected to achieve per-unit energy savings of at least 5% compared to current best-on-market products, while providing a service comparable to, or better than, current products—without large cost increases in the long term. Alternatively, proposals can focus on establishing production cost savings of at least 20% for existing highly efficient equipment. Demonstrated energy savings have typically exceeded the target level.

All teams must include at least three students (undergraduate and/or graduate) led by a qualified faculty advisor. Prototype development teams may be based in engineering or a related discipline (*e.g.*, physics) and can receive up to $25,000 in project support. All proposals are judged on their own merits and compete against a national pool. There can be more than one team at a given institution participating in the Competition.

The projects will be carried out in the 2014/2015 academic year, culminating in a national webinar of student presentations in the spring of 2015 and faculty-led written reports in summer 2015. Team projects, results, and competition winners will be posted on the Max Tech and Beyond website.

Instructions:

The Request for Proposal (RFP) process will open by April/May, 2014 through the Berkeley Lab Subcontracts office. Please check the Website for updates and/or contact the management email account (maxtech@dante.lbl.gov), with any submission instruction questions or other inquiries. The Proposals will be reviewed on a rolling basis with final submissions due in May/June , 2014.

BERKELEY LAB Lawrence Berkeley National Laboratory

U.S. DEPARTMENT OF ENERGY