



L•PRIZE®

U.S. Department of Energy



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**\$12M**  
Prize Pool

## 3 PHASES:

- Concept
  - Prototype
  - Manufacturing & Installation
- + Teaming Opportunities

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[americanmadechallenges.org/lprize](http://americanmadechallenges.org/lprize)

# L-Prize Phases and Awards

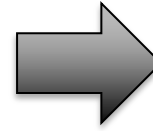




# L-Prize Innovation Goals and Focus



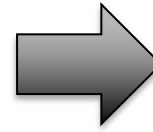
**Efficacy**



Increase lighting efficacy (lm/W) by 25 to 50% vs. today



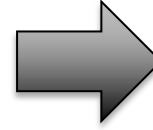
**Quality of Light**



Encourage lighting that reinforces health, productivity, and well-being



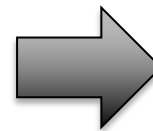
**Connectivity**



Integrate controls to increase energy savings and performance, enable grid flexibility



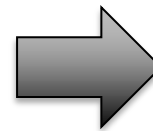
**Product Life Cycle**



Reduce environmental impact over life cycle with sustainable use and end of life



**Innovation and Inclusion**



Realize innovation for diversity, equity, and inclusion

# Consistent, Challenging Technical Requirements for All Phases

Efficacy	Quality of Light	Connectivity	Product Life Cycle	Innovation and Inclusion
<ul style="list-style-type: none"><li>✓+<input type="checkbox"/> Luminaire efficacy</li></ul>	<ul style="list-style-type: none"><li>✓ Chromaticity</li><li>✓ Dimming range</li><li>✓ Glare control</li><li>✓ Light output</li><li>✓ Spectral data reporting</li><li>✓+<input type="checkbox"/> Color rendition</li><li>✓+<input type="checkbox"/> Flicker</li><li><input type="checkbox"/> White-tunable</li></ul>	<ul style="list-style-type: none"><li>✓ Interoperability</li><li>✓ Addressability</li><li>✓ Energy reporting</li><li>✓ Lighting control strategies</li><li>✓ Luminaire-level lighting control</li><li>✓+<input type="checkbox"/> System resilience</li><li>✓+<input type="checkbox"/> Fault detection and diagnostics</li><li>✓+<input type="checkbox"/> Grid services capable</li><li><input type="checkbox"/> Sensor ready and upgradeable</li><li><input type="checkbox"/> Ease of install and configuration</li></ul>	<ul style="list-style-type: none"><li>✓ Driver lifetime</li><li>✓ Chromaticity Maintenance</li><li>✓+<input type="checkbox"/> Replaceable components</li><li>✓+<input type="checkbox"/> Lumen maintenance</li><li><input type="checkbox"/> Design for disassembly</li></ul>	<ul style="list-style-type: none"><li><input type="checkbox"/> Technical innovation</li><li><input type="checkbox"/> Innovation for diversity, equity, and/or inclusion</li></ul>
<p><b>Key</b></p> <ul style="list-style-type: none"><li>✓ = Mandatory</li><li>✓+<input type="checkbox"/> = Mandatory + Optional Points</li><li><input type="checkbox"/> = Optional Points Only</li></ul>				

# L-Prize Scope and Target Applications

- Light-emitting diode (LED) technology
- Complete lighting system (luminaires, sensors, control devices, interfaces)
- Commercial and institutional sector applications
- Luminaires must be appropriate for ambient lighting in building interiors such as offices, healthcare facilities, educational facilities, and other applications where linear lighting has been predominant
- Luminaires designed or intended for task, accent, display, outdoor, and industrial applications including high/low bay are not eligible
- Specific form factors are not required — innovation is welcomed

# Teaming Opportunities

- Some teams and innovators have already registered and are looking for partners. Check it out at: <https://www.herox.com/LPrize/teams>
- An RFI will be issued with the Prototype Phase and kept open to identify teaming partners interested in production and installation of winning designs
- A teaming partner list will be published and regularly updated
  - Manufacturing partners
  - ESCOs
  - Utilities
  - Installation contractors
  - Etc.





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# QUESTIONS?

[www.herox.com/LPrize/forum](http://www.herox.com/LPrize/forum)

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