

**From:** Peter V. Schwartz pschwartz@calpoly.edu  
**Subject:** MIT: "The Engine for Innovation"... At Cal Poly Too?  
**Date:** October 27, 2016 at 10:41 AM

PS

**To:** Jeffrey Dyer Armstrong jarmstro@calpoly.edu

**Cc:** Dennis K. Elliot delliot@calpoly.edu, Eric H. Veium eveium@calpoly.edu, Craig Baltimore cbaltimo@calpoly.edu, Margot McDonald mmcdonal@calpoly.edu, Lonny Simonian lsimonia@calpoly.edu, Patrick Lemieux plemieux@calpoly.edu, William L. Ahlgren wahlgren@calpoly.edu

Jeffrey,

Please see the forwarded message from MIT President Reif announcing "The Engine" a center dedicated to accelerating new technologies. This announcement coincided with yesterday's meeting of staff and faculty dedicated to renewable energy (copied) for charting the future of Cal Poly's Renewable Energy Institute. We envision a dedicated center to streamline and support energy innovations discovered, developed, and deployed at and by Cal Poly. Craig Baltimore of Architectural Engineering volunteered to start the center for his sabbatical next fall and will submit the proposal next week.

Thanks for considering this communication.

Pete

Begin forwarded message:

**From:** "President L. Rafael Reif" <aacomment@mit.edu>  
**Subject:** An exciting step forward for our innovation ecosystem  
**Date:** October 26, 2016 at 3:23:44 PM PDT  
**To:** pschwartz@alum.mit.edu  
**Reply-To:** aacomment@mit.edu



**Massachusetts Institute of Technology**

**L. Rafael Reif, President**

To the members of the MIT community,

This evening, a few blocks from our campus, MIT will launch something new: an accelerator specially geared to serve new ventures based on cutting-edge science and technology. It will supply the particular combination of resources they need to develop and bring to market innovations that address society's most important challenges. We're calling it [The Engine](#).

### **Why is MIT launching The Engine?**

We designed The Engine in response to a frustration we heard repeatedly from faculty, student and alumni entrepreneurs as well as corporate leaders: that while venture capital (VC) funding works beautifully for start-ups that can reach market profitability, IPO or buyout in three to five years, it is not as well geared to support breakthrough technologies built on new science and engineering, which typically take more time.

Today, innovators in fields like energy, manufacturing, robotics, biotech and medical devices often find it extremely difficult to secure the sustained funding, space, equipment, expertise and networks to fully develop their technologies; this

struggle itself can needlessly prolong the development process, stretching it to a decade or more. All too often, "tough-tech" entrepreneurs never find sufficient support, which discourages others from trying, a dynamic that leaves many promising ideas stranded in the lab.

MIT's mission statement directs us not only to "advance knowledge" and "educate students," but also to bring "knowledge to bear on the world's great challenges." If we hope to deliver serious technological solutions to urgent global challenges—like clean water, climate change, sustainable energy, cancer, Alzheimer's, infectious disease, and more—we need to make sure the innovators working on those problems see a realistic pathway to the marketplace. The Engine can provide that pathway by prioritizing breakthrough ideas over early profit, helping to shorten the time it takes these ventures to become "VC-ready," providing local space and comprehensive support in the meantime, and creating an enthusiastic community of inventors and supporters focused on delivering new science-based innovation to make a better world.

As I write in this *Boston Globe* [op-ed](#), I am convinced that by adding this vital new resource to the Greater Boston ecosystem, we can empower its innovators and catalyze its growth.

You can read more about the concept [here](#).

### **How will it work?**

Structurally, The Engine will be a separate entity, giving it the freedom to work with innovators from inside and outside MIT whose technologies hold the greatest promise for solving important societal problems.

If you have questions—from how The Engine will operate, to how you and your company might get involved—I encourage you to consult The Engine's [website](#), which will be updated regularly with further details. We will also hold a community forum on Nov. 30, to be announced via MIT News.

### **A natural next step**

Of course, The Engine is only the latest step in MIT's longstanding drive to make our campus the most stimulating and supportive academic environment in the world for innovation. Over decades – and now with the leadership of the [MIT Innovation Initiative](#) and the [Martin Trust Center](#) for MIT Entrepreneurship—the Institute has worked with growing intensity to establish and enhance an array of resources to help MIT makers, inventors and entrepreneurs get their best ideas off the ground, here on campus. One look at this [remarkable roster](#) of centers, programs, hackathons, seed funds, contests, clubs and curricula gives a vivid impression of the depth and breadth of these efforts to inspire and cultivate our home-grown entrepreneurs.

What's more, as we pioneer the new field of innovation science, which studies the underlying dynamics of innovation itself, MIT is investing extensively in the

infrastructure of innovation, from our growing network of maker spaces to the redevelopment of Kendall Square. Our efforts extend well beyond Cambridge, as well, from MIT's leading role in the national Advanced Manufacturing Partnership, to the work of MITx to train aspiring entrepreneurs around the world. And of course, inspiring every one of these efforts is the example of our graduates, through the more than 30,000 active firms founded by living MIT entrepreneurs.

Building on this deep entrepreneurial legacy, The Engine is a natural, complementary next step, one that aims to strengthen the MIT community, our Cambridge neighborhood and our regional innovation ecosystem, and to enhance its impact and influence on the nation and the world.

**With thanks**

The Engine came to life through the leadership of Executive Vice President and Treasurer Israel Ruiz, who drew on his deep grasp of the regional innovation ecosystem and his relationships with its entrepreneurial leaders to pioneer this important new idea. In this effort, he worked closely with Provost Marty Schmidt, who brought invaluable expertise from his work inside multiple tough-tech start-ups, and EECS Department Head Anantha Chandrakasan, an inspiring thought-partner who also helped build crucial support.

This effort also benefited from the insights, ideas and hard work of many creative thinkers and doers inside and outside MIT. On behalf of the MIT community, I express our gratitude to everyone involved.

I believe The Engine can make a decisive difference in helping young companies translate fresh science into transformative societal gains. I hope you share the sense of purpose and opportunity.

With high aspirations for the future—let's get started!

Sincerely,

Rafael Reif

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