A home for Tough Tech founders.
The Engine

The Engine, built by MIT, is a venture firm that invests in early-stage companies solving the world’s biggest problems through the convergence of breakthrough science, engineering, and leadership.

Our mission is to accelerate the path to market for Tough Tech companies through access to a unique combination of investment, infrastructure, and a vibrant ecosystem.
A Need for Unlocking Commercialization in Tough Tech

The Engine invests in early-stage companies solving the world’s biggest problems through a convergence of breakthrough science, engineering, and leadership. Its unique venture model accelerates companies’ path to market.
The opportunity...

The Engine is unlocking the potential of MIT, the surrounding institutions & regions where breakthrough opportunities lie. It does so by investing in companies that are rooted in breakthrough science & technology that will transform markets. Its model uniquely positions the Fund to develop these companies at the earliest stages to commercialization.

- THOUSANDS OF P.I.S
- CROSS INSTITUTIONAL RESEARCH LABS
- HUNDREDS OF PATENTS FILED ANNUALLY IN BOSTON REGION

Strong Start with Fund I

PORTFOLIO COMPANIES

TOTAL EMPLOYEES

TOTAL CAPITAL RAISED

27

450+

$550M+
...to build the revolutionary companies of tomorrow

**Form Energy**
Making renewable energy available 24/7 with bidirectional power plants.

**Boston Metal**
Efficient, lower-cost production of steel and alloys with zero emissions.

**Cambridge Electronics**
Significantly more efficient electronics: from data centers to electric vehicles.

**Via Separations**
Up to 90% energy savings in separation process in the pulp & paper, chemical, and dairy industries.

**Commonwealth Fusion Systems**
Safe, unlimited, carbon-free fusion power for the grid in 10-15 years.

**Bosion Metal**
Efficient, lower-cost production of steel and alloys with zero emissions.

**Cellino**
A tissue foundry for regenerative medicines.

**Mori**
A natural coating to reduce food spoilage and packaging waste.

**Lucy Therapeutics**
Breakthrough mitochondrial-based therapies for neurological diseases.

**Vaxess Technologies**
Vaccines & immunotherapies applied by patch & mimicking natural challenge to the immune system.

**Biotbio**
Transforming wastewater into public health observatories.

**SEASPIRE skincare**
The future of sustainable skincare.

**ISEE**
Automating the logistics industry with a humanistic AI-powered autonomous driving system.

**Hyperlight**
Ultra-efficient optical circuits to de-bottleneck data centers and telecom networks.

**Analytical Space**
Real-time satellite network connecting space to Earth 24/7.

**Sync Computing**
Building the first Optimization Processing Unit to help unlock solutions from computing to networking.

**Radix Labs**
Automating biology lab processes from experiments to mass production.

**I2Sense**
Chemical sensing technologies to track and quantify the invisible.

**Rise Robotics**
Enabling the next era of fully electrified heavy machinery.

**Inorganic Intelligence**
Next generation AI chips

**Vaccine & Immunotherapeutics**
Pioneering building construction through technology
## Building Technologies: Sample Investments

<table>
<thead>
<tr>
<th><strong>WoHo</strong></th>
<th><strong>Boston Metal</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Efficient, lower-cost production of steel and alloys with zero emissions.</td>
</tr>
<tr>
<td>Creating beautiful, intelligent, and scalable building systems that raise the standards of low-to-high rise construction.</td>
<td></td>
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<tr>
<td><strong>Founder</strong></td>
<td>Tadeu Carneiro, Rich Bradshaw, Adam Rauwerdink, Donald Sadoway, Antoine Allanore, Bob Hyers, Jim</td>
</tr>
<tr>
<td><strong>Background</strong></td>
<td>MIT Department of Materials Science and Engineering</td>
</tr>
<tr>
<td><strong>Industry</strong></td>
<td>Advanced Manufacturing, Energy</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>WoHo is transforming the way spaces are conceived and created. The company integrates architectural design, engineering, and construction into a single, streamlined platform to quickly build resilient, sustainable, high-rise buildings.</td>
</tr>
<tr>
<td><strong>Founder</strong></td>
<td>Israel Ruiz, Débora Mesa and Antón García-abril</td>
</tr>
<tr>
<td><strong>Background</strong></td>
<td>MIT, Ensamble Studio</td>
</tr>
<tr>
<td><strong>Industry</strong></td>
<td>Advanced Manufacturing, Advanced Materials</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>Today, the steel industry is the largest industrial source of CO2 emissions because of a reliance on coal. Boston Metal removes coal from the process, driving CO2 emissions to zero, while also providing substantial OPEX and CAPEX savings.</td>
</tr>
</tbody>
</table>
The Engine’s Tough Tech Policy Work

Building a 21st-century American Economy
The Role of Tough Tech in Ensuring Shared, Sustainable Prosperity
November 2020

Arguing for the Prioritization of Tough Tech Innovation

1. The Engine-Belfer Center Tough Tech Mandate

2. Two Policy Proposal Papers
   a. Creation of a Foundational Technology Development and Deployment Office
   b. National Tough Tech Public-Private Partnership to Spur Economic Growth