

CHANGEMAKERS

The People Who Help Run Massachusetts and Rarely Get Thanked For It



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“The future belongs to those who show up for it.”

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Behind Every Town Hall Is a Team Working Harder Than You Know

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Massachusetts is one of the few states where a large share of its 351 cities and towns are run without a mayor at all. Many communities are led instead by a town manager who answers to a select board, a structure built for smaller populations but every bit as demanding as running a city. Whether the person in charge holds the title of mayor, town manager, town administrator or select board chair, the job looks the same from the inside. It means balancing a budget that never stretches far enough, sitting through permitting hearings that can take years and trying to bring in the kind of investment that keeps a community alive without pricing out the people who already live there.

We spend a lot of time in Massachusetts city halls and town offices. One thing has stood out every single year. The leaders who move a clean energy project forward or land a new employer for their downtown rarely get asked how they did it. They just get asked to do it again next year.

For companies weighing whether to locate or expand in Massachusetts, this is worth knowing. The towns doing the most interesting work on permitting reform, clean energy siting and economic development are often the smaller ones you have not heard of yet, run by people who have been in the job long enough to know exactly where the friction points are and how to clear them. A conversation with the right town manager can save a company more time than a dozen consultants.

For the taxpayers footing the bill for all of it, the work is not always visible, but it is not invisible either. It shows up in the streetlight that finally gets fixed, the grant that pays for a new fire truck instead of a tax increase and the solar array on the school roof that quietly lowers the district's energy bill for the next 25 years. Somebody sat in a lot of long meetings to make each of those things happen.

Massachusetts asks a great deal of the people who run its cities and towns. We see the work. We know it is hard and we are grateful somebody is willing to do it.



INNOVATION SPOTLIGHT

Berkshire Innovation Center

A Small Team Building a Big Spark in Western Massachusetts

Drive out to Pittsfield and you will find one of the most quietly remarkable stories in Massachusetts clean energy, sitting on land that used to belong to General Electric. The William Stanley Business Park is named for the man who invented the transformer right there. For decades GE ran one of the most important electrical testing and manufacturing operations in the country from that same ground. When GE eventually left, it took thousands of jobs with it and left behind a brownfield that took the state and the city years to clean up.

Out of that history came the Berkshire Innovation Center. The idea started in a bond bill filed by then State Senator Ben Downing back in 2008 and it finally got funded through the Massachusetts Life Science Center in 2014. Today BIC occupies 24,000 square feet on that same historic site and it has become the connector between the startup ecosystem pouring out of Boston and Cambridge and the pilot sites and manufacturing space those companies actually need once they are ready to scale.

BIC is not slowing down. Construction on an 8,000 square foot annex is set to break ground this fall, with a portion of the new space rising two stories. Part of that expansion is built around advanced optics technology developed by a company that grew out of the University of Massachusetts, whose lenses can dramatically improve how efficiently data is transmitted. That may sound like a small thing until you learn that better optical transmission could cut a data center's energy use by as much as 40 percent, which makes an optics company one of the more unexpected clean energy plays in the entire state.

The rest of BIC's growth is aimed squarely at the grid. Ben and BIC's Clean Energy Leadership Group, a group of volunteer board members and industry partners, are pushing to build a microgrid and test bed across the 54 acre business park, meant to give companies developing smart circuit breakers, virtual power plants and other grid technology a real place to deploy and prove out their products. A couple of miles away sits EPRI, a major energy research nonprofit with deep roots in the same GE testing history. BIC is working to build a stronger bridge between that resource and the companies who could benefit from it.

None of this happened by accident. Washington noticed. BIC was named one of only 5 communities nationwide and the only one in Massachusetts to win the Department of Energy's Make It Prize for supporting the clean energy manufacturing ecosystem. It shared that honor with fellow winners in Chicago, Columbus and Tulsa, cities many times its size.

There's this heartbeat out of Boston and Cambridge that's fueling our economy and we wanted to reach every corner of the Commonwealth.



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<https://www.berkshireinnovationcenter.com>

COMPANY SPOTLIGHT

Commonwealth Fusion Systems

The Massachusetts Company Trying to Build a Star

Fusion is the same reaction that powers every star in the sky. One Massachusetts company is racing to bring it down to earth. Commonwealth Fusion Systems is building a machine in Devens designed to fuse atoms together instead of splitting them, the same basic process the sun uses to make its own light and heat. If it works the way the science says it should, it will not just be a scientific milestone. It will be the birth of an entirely new clean energy industry and Massachusetts is where it is happening first.

Commonwealth Fusion Systems grew directly out of MIT. VP of Global Policy and Public Affairs Kristen Cullen has been with the company almost 8 years, joining back when the team was still working out of MIT's own labs. The company has since grown substantially, with its research and development headquarters and its SPARC demonstration machine in Devens, a manufacturing facility in Somerville and a stealth facility in California.

The scale of investor confidence in this company is hard to overstate. In 2021, 3 months after CFS proved its new high temperature superconductor magnet actually worked, the company raised \$1.8 billion in a single round, the largest fundraising round in clean tech history at the time and the largest in Massachusetts history. Since then CFS has raised more than \$4 billion in total, including a \$1 billion extension round and a Massachusetts Clean Energy Center tax credit, both landing this past summer.

SPARC, the demonstration machine now taking shape in Devens, is about 80 percent complete and is expected to turn on in late 2027. Its job is to prove for the first time anywhere that this kind of magnet technology can produce fusion power at a genuinely commercial level. The world has built roughly 170 fusion machines before this one. None of them used the high temperature superconductor magnets CFS developed alongside MIT, which is exactly why so many people are watching Devens right now.

Fusion cannot melt down. It is physically impossible and it produces no spent nuclear fuel, which puts it in a completely different safety category than the advanced nuclear reactors it sometimes gets lumped in with. CFS is working on legislation for the next Massachusetts legislative session that would legally define fusion as its own category separate from fission, a distinction the company considers essential to its long term public support.

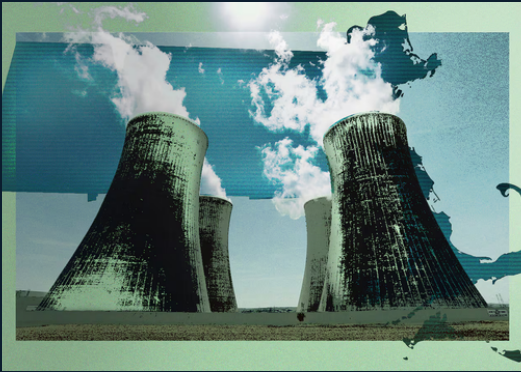
Massachusetts is where CFS designs and builds. The company's first commercial power plant, called ARC, is being sited in Virginia, where zoning is already done and permitting is underway. A commercial fusion plant is designed to eventually run with a lean operating crew once it is fully up and running, though the Virginia site will need far more people than that to get it built. Still, the jobs, the research and the manufacturing base are staying right here in Massachusetts. CFS has not ruled out putting one of its future plants in Massachusetts too. The company is now working through exactly where its first block of plants will land.



CONNECT WITH COMMONWEALTH FUSION SYSTEMS

<https://cfs.energy>

NEWS CORNER



'The tide's turning': New England's surprising embrace of nuclear power

All 6 New England governors, 4 Democrats and 2 Republicans, signed a joint statement in March committing to keep the region's existing nuclear plants running and jointly explore advanced nuclear technology for the future. Massachusetts Governor Maura Healey called nuclear part of the solution for meeting climate goals without ignoring rising energy costs. Separately, she also tasked a University of Massachusetts Lowell professor with mapping out the state's future in both next generation nuclear and fusion, the same fusion technology Commonwealth Fusion Systems is racing to bring online right here in Devens.

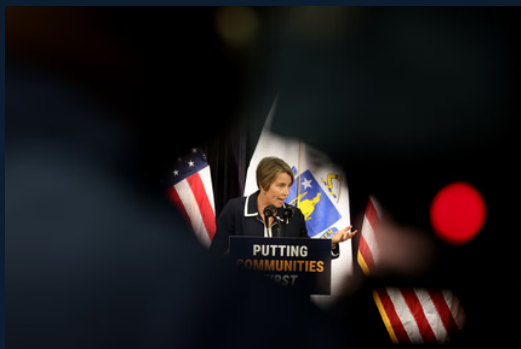
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Dig Energy completes first project with novel geothermal drilling tech

A New Hampshire startup called Dig Energy just finished its first commercial job, drilling seven boreholes for a geothermal heating and cooling system at Suffolk Construction's Boston headquarters. The company's drill uses a high pressure water jet instead of a traditional bit and casing, cutting water use by 90 percent and waste material by 75 percent on the Boston job while running quietly enough for workers to hold a conversation next to the rig. Dig says the approach could cut geothermal drilling costs by up to 80 percent, which could finally make this all electric heating and cooling technology affordable for far more buildings across New England.

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Healey signs executive order to block new data centers in Mass. unless they have local approval

Governor Maura Healey signed an executive order this month requiring any new data center that wants to build in Massachusetts to either generate its own clean electricity or pay into a new fund that protects other ratepayers from rising bills. Large projects will also need a community benefits agreement in place before state agencies will issue permits. The order does not apply to the already underway Lowell project but will shape how every future data center gets built in the Commonwealth, a real turning point for a state trying to keep pace with the artificial intelligence boom without pushing costs onto the households who did not ask for it.

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"OUR ENERGY FUTURE IS NOT FATE BUT CHOICE."
 – AMORY LOVINS, PHYSICIST AND ENERGY EFFICIENCY PIONEER