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Maher Damak, the Tunisian from MIT who recovers the water power plants send into the sky

That white plume rising from cooling towers is not smoke: it is lost water. An engineer who left Tunis at 18 has figured out how to catch it.

BY THE **EDITORS** · DECEMBER 3, 2026 · 5 MIN READ



Dr. Maher Damak, co-founder and CEO of Infinite Cooling. Photo: Infinite Cooling.

Look at a power plant from a distance and you will almost always see the same picture: enormous towers releasing a white cloud. Many people take it for pollution. In reality, it is water vapor, millions of liters of fresh water drifting away every day. In a world where water is becoming scarce, Maher Damak asked himself an engineer's question: what if we could get it back?

The answer is called Infinite Cooling. Founded in 2019 as a spinoff from the Massachusetts Institute of Technology, the company he co-founded and leads as CEO develops technologies that cut the water consumption of cooling towers, the equipment that power plants, factories and, increasingly, the data

centers that run artificial intelligence cannot do without.

From Tunis to Polytechnique, then MIT

Born in Tunis, Maher Damak attended the Lycée pilote Bourguiba, one of Tunisia's elite public high schools. At 18, he left Tunisia for the École polytechnique, France's top engineering school, where he focused on mathematics and physics and earned a master's degree in energy science in 2013. Even then, coursework was not enough for him: he spent eight months volunteering with an organization in a disadvantaged neighborhood in the Paris suburbs and presided over the association that runs the school's cultural festival.

He then crossed the Atlantic to join MIT, in the lab of Professor Kripa Varanasi, a specialist in the interactions between surfaces and liquids. He earned a master's degree in mechanical engineering there in 2015, followed by his PhD in 2018. It was in that lab that the idea that would change his life was born.

Catching a cloud

The principle is as elegant as it is easy to explain. The vapor plume is passed through a beam of ions, which gives the tiny water droplets an electric charge. A mesh placed in their path then attracts and captures them, like a magnet. The recovered water can be reused and, according to MIT, is about a hundred times purer than the original cooling water.

> **“If we can capture that, we can basically capture anything.”**
>
> MAHER DAMAK, MIT NEWS, AUGUST 2021

According to MIT, the technology can cover up to 20% of a power plant's water needs, or about $1 million in savings a year. In 2021, Infinite Cooling tested its system on the cooling tower of MIT's nuclear reactor, then raised $12.25 million in its first major funding round. In 2024, the company was chosen by EDF, France's national power utility, for a trial at the Bugey nuclear power plant, one of the largest in the country. Today it also offers TowerPulse, artificial intelligence software that continuously analyzes how towers are operating in order to reduce their water and energy use, with data centers squarely in its sights.

HIS JOURNEY AT A GLANCE

Tunis	Lycée pilote Bourguiba; leaves for France at 18.
2013	Master's degree in energy science, École polytechnique.
2017	First place, U.S. Department of Energy Cleantech University Prize.
2018	PhD from MIT; MIT $100K grand prize; Lemelson-MIT Prize; Forbes 30 Under 30 in Energy.
2019	Co-founds Infinite Cooling and becomes its CEO.
2024	Trial with EDF at the Bugey nuclear power plant.

A shower of awards

Even before the company was founded, the project was racking up awards. In 2017, it took first place in the U.S. Department of Energy's Cleantech University Prize. Maher Damak was named to the Forbes 30 Under 30 list in energy. In 2018, the team won the $100,000 grand prize in MIT's famous entrepreneurship competition, followed by the MassChallenge Diamond Award. That same year, Maher Damak received the Lemelson-MIT Prize, which honors MIT's most promising young inventors.

In March 2018, at 28, he was received in Tunisia by the Minister of Higher Education. It was a powerful symbol: a country discovering that one of its own was making his mark at one of the world's great temples of innovation.

Opening the door for those who follow

At MIT, Maher Damak did more than invent. He also founded Tunisia@MIT, an association that keeps Tunisian culture alive on campus and brings together Boston's Tunisian community. It was a way of telling the Tunisian students who came after him that they belong at the best universities in the world.

He was also selected as one of the French-American Foundation's Young Leaders in 2022, a program that brings together future French and American decision-makers.

At a time when drought is hitting Tunisia, like much of the planet, Maher Damak's story carries special resonance. An engineer educated in Tunis is devoting his career to saving the most precious resource there is. There is something deeply Tunisian about that.

TUNISIAN PRIDE

From Tunis to MIT, Maher Damak turns vapor into water and ideas into a company. A Tunisian helping the world stop wasting water: we could not dream of a finer mission.

SOURCES

1. Prix Lemelson-MIT, Maher Damak: lemelson.mit.edu/award-winners/maher-damak
2. MIT News, June 8, 2018: news.mit.edu/2018/new-system-recovers-fresh-water-power-plants-0608
3. MIT News, August 3, 2021: news.mit.edu/2021/infinite-cooling-nuclear-0803
4. Infinite Cooling, team: www.infinite-cooling.com/about
5. Power Engineering, September 24, 2024: www.power-eng.com/nuclear/edf-infinite-cooling-partner-up-to-reduce-water-consumption-in-nuclear-plants/
6. Business Wire, June 29, 2021: www.businesswire.com/news/home/20210629005011/en/
7. MIT Tata Center, July 5, 2017: tatacenter.mit.edu/infinite-cooling-takes-first-place-at-the-us-department-of-energys-does-cleantech-university-prize-competition
8. MIT Sloan, May 15, 2018: mitsloan.mit.edu/press/startup-new-technology-enabling-water-sustainable-thermoelectric-power-wins-2018-mit-100k-entrepreneurship-competition
9. French-American Foundation: frenchamerican.org/young-leader/maher-damak/
10. Business News, March 5, 2018: businessnews.com.tn/?p=1151372
11. African Manager, February 27, 2018: africanmanager.com/17_tunisie-une-tete-bien-faite-mais-pour-les-autres/

Facts checked by the Tunisian Success editors in November 2026. Spotted an error? Write to us at contact@tunisiansuccess.com.