During nearly four years as U.S. energy secretary, Ernest Moniz earned a reputation as a savvy political hand, particularly as nuclear physicists go, while his Founding Fathers locks made him the most meme-able member of President Barack Obama’s cabinet.

When Donald Trump took office, Moniz returned to his academic home at MIT, serving as a professor emeritus and special advisor to President L. Rafael Reif. He held his fire in the early weeks of the new administration, as the White House took aim at Obama’s Climate Action Plan, appointed climate-change deniers to critical posts, and sought deep funding cuts to the Department of Energy. But more recently Moniz has returned to the public stage, condemning Trump’s withdrawal from the Paris climate agreement.

He also took on a new role as chief executive of the Nuclear Threat Initiative, bringing his experience helping to negotiate the Iran nuclear deal and reviewing the global weapons stockpile to an organization dedicated to preventing attacks with weapons of mass destruction. In addition, he joined the board of fusion startup Tri Alpha Energy and helped establish the Energy Futures Initiative, a nonprofit promoting clean-energy innovation and policies.

In a recent interview with *MIT Technology Review*, Moniz discussed the impact of the administration’s policies on U.S. leadership, how it feels to have his legacy come under attack, and what’s next for nuclear. Below is an edited excerpt of the interview.

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You responded fairly sharply to President Trump’s decision to withdraw from the Paris climate deal. What are the biggest or most immediate dangers of that decision in your view?

First of all, withdrawing from the Paris accord fits a pattern of many statements and actions that have called into question
our leadership, and frankly our reliability, in terms of carrying out various commitments. The pattern has been to kind of then circle back, and try to mend fences every now and then. But the reality is the uncertainty in our reliability is a very serious issue for our geopolitical leadership.

At the next level, withdrawing from the Paris accord obviously undercuts the leadership on that specific issue, an issue of tremendous global concern. The United States demonstrated leadership in many ways, but in particular in two ways that I’ll mention. One was President Obama working with the Chinese to have the joint announcement with President Xi Jinping in November of 2014, which was a sea change on the path to Paris. There was also leadership in the area of clean-energy innovation. The United States Department of Energy was, obviously, in the middle of this, getting 20 countries at that time, plus 28 major international investors, to come forward in Mission Innovation, saying that we need to pick up the pace in innovation to meet our long-term goals.

That leadership and its results were hard-earned, and an announcement to withdraw from the Paris accord obviously weakens that. We will see leadership from the United States now at a sub-national level, with mayors and governors and universities and businesses all stepping forward. I think that is tremendous, and very, very important. But you can’t be Pollyannaish about it. There’s no way that we aren’t compromised when the United States federal government is not exercising leadership.

**How do you react to seeing a big part of your and President Obama’s climate and clean-energy legacies come under deliberate attack?**

The underlying reality is there’s virtually no one who believes that [rolling back clean-energy initiatives] is going to lead to a resurgence, let’s say, with coal. It’s unlikely to lead to new coal plants being built because, again, businesses fully anticipate that in the end we’re not going back from a low-carbon trajectory. And any investments in new plants are 40- to 50-year investments, which would have a very good chance of getting stranded a few years down the road.

But there’s no doubt that if the federal government is not rowing in the same direction as the governors and the mayors, etc., it obviously impedes progress and it will just be more costly, and more difficult, for us to get back on track.

**“The uncertainty in our reliability is a very serious issue for our ... leadership.”**

You’ve stressed that nuclear should be a part of the energy mix. So what can or should the U.S. be doing to bolster that sector at this stage?

In a number of states, in one way or another, without calling it exactly that, nuclear is being recognized as a zero-carbon source. And so you’ve seen states, like New York and Illinois in particular, try to sustain the existing plants because of their low-carbon qualities. Having said that, I do believe we will still see more premature closures. The question is how many, and at what pace. As far as new construction goes, obviously, the cost overruns are tough. I would just say that a direction that I remain very interested in is that of a new generation of small modular reactors. And the first of those is in the licensing process.

**NuScale?**

NuScale. Right. And that would be aimed for deployment in maybe seven years or so, for a first reactor. I think this is a very interesting direction both because the designs are attractive and, secondly, the financial engineering is very, very different for a 50-megawatt plant versus a 1,200-megawatt plant. Again, I don’t want to be Pollyannaish about it, but I think this is a very, very interesting direction, and could present a pathway for new nuclear builds going forward. —James Temple

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**TO MARKET**

**Mark 1**

Voice-Enabled Assistant

**COMPANY:** Mycroft

**PRICE:** $180

**AVAILABILITY:** Now

Mark 1 is no Amazon Echo: it looks like an ‘80s clock radio mashed up with WALL-E, and speaks with a robotic British accent. But the startup behind it, Mycroft, hopes it has similar appeal to hackers, students, and companies that want a voice-enabled assistant they can run on all kinds of devices and alter at will. Mycroft—whose voice assistant is also called Mycroft—isn’t trying to rival digital helpers from Apple, Google, or Amazon, says CEO Joshua Montgomery. It wants to democratize the assistant—making it adaptable for everyone from kids working on school projects to companies that want to use open-source voice-enabled technology for a call center. —Rachel Metz