

MIT and Eni renew energy partnership

Massachusetts Institute of Technology

Capping what he called a successful five-year partnership between the Italian energy company Eni and the MIT Energy Initiative, Eni CEO Paolo Scaroni this week enthusiastically renewed his company's support of MITEI.

After his ceremonial signing of the new agreement with MIT President L. Rafael Reif, Scaroni said, "When I started this whole thing, I did it, as we say in Italian, 'to save my soul.'" When he signed the initial agreement of support for MITEI, Scaroni said, he was largely motivated by the desire to be able to answer questions from environmentalists and others who would ask him, "Why don't you do something for the future of the world?"

But over the years of the partnership, Scaroni said, he has come to realize that Eni's support of MITEI is also good for business. "The cooperation has been so successful," he said. "Cooperation between MIT and Eni can give us phenomenal results."

While one of the key elements of the partnership has been the creation of the Eni-MIT Solar Frontiers Center, the collaboration extends to other areas as well, Scaroni said, [including research](#) [1] on such core technologies as reservoir management.

Scaroni pointed out that on average, only about 33 percent of the fuel in the ground is actually recoverable. But suppose, he said, that through research on reservoir management, methods were developed to achieve 36 percent recovery. "Three percent more would be so much money, so much more production, that we could pay back [the research costs] for the next 100 years, not just five years. So the potential for improvement of our results through this cooperation with MIT is so huge that we certainly are very much convinced to go ahead."

While the exact funding level was not disclosed, the agreement between Eni and MIT "significantly exceeds" the \$5 million annual commitment required for founding members of MITEI, according to a press release, making Eni the energy initiative's largest research sponsor. Eni has directly supported 100 energy researchers at MIT over the past five years, and 52 students have been supported as Eni-MIT Energy Fellows.

"This is a very important day for MIT," Reif said. "This collaboration has been extremely productive by incentivizing very new and novel ideas. We celebrate this renewal, and hopefully we'll find many more solutions."

In a public talk following the signing, Scaroni discussed the future of the global market for natural gas, which he said is subject to significant uncertainties. He pointed out that natural gas prices vary today by an extraordinarily wide margin, from about \$3 per thousand cubic feet in the United States to \$18 in Asia.

MIT and Eni renew energy partnership

Published on Electronic Component News (<http://www.ecnmag.com>)

"The prices in the United States do not make any sense," Scaroni said, citing the wide discrepancy between gasoline and natural gas prices for an equivalent amount of energy. Over time, he said, that discrepancy is unsustainable; he predicted that either U.S. gasoline prices will go way down or natural gas prices will go way up. In addition, he said, the discrepancies between oil prices in different regions of the world will gradually even out "as people find better, cheaper ways of moving gas from one part of the world to another."

Scaroni said that significant discoveries of natural gas continue around the world: He noted that Eni, one of the world's largest diversified energy companies, has recently made a huge new find in Mozambique. One of the largest natural-gas fields ever found, it is believed to contain 75 trillion cubic feet of gas — equivalent to "four years' worth of total U.S. consumption, in one gas field," he said.

Because of its location and its low production costs, this field should become a major new source of natural gas for rapidly growing Asian markets, Scaroni said. But he said there are major uncertainties in future Asian demand — especially in China, which now uses relatively little natural gas. While current projections estimate that by 2020 China's per-capita usage of natural gas will be only 10 percent that of the United States, others estimate that the figure could grow to as high as 25 percent, he said. The impact of such a difference on global natural gas markets could be significant, he said.

While the Mozambique discovery is one of the largest ever, Scaroni said, it is part of a long history of Eni involvement in developing oil and gas resources in Africa. Already, he said, the company has operations in 22 different African countries, and is the largest producer of hydrocarbons there. And Eni, he said, makes sure that its operations on that continent provide direct benefits to the local people.

"Wherever we go, we want the people who live in the region to feel the benefit of our presence," Scaroni said. One way the company accomplishes that, he said, is by using natural gas produced from oil wells — which most companies simply flare off — to fuel power plants that serve the region. For example, Eni-built plants now provide 20 percent of the electricity in Nigeria, Africa's most populous country, and 70 percent of Congo's electricity.

While operating such plants, which are subject to the vagaries of local regulations, is risky from a business perspective, Scaroni said, "We believe that it is so important to make our presence beneficial for the country that we are willing to take some risk."

Source URL (retrieved on 07/31/2014 - 2:15am):

<http://www.ecnmag.com/news/2013/02/mit-and-eni-renew-energy-partnership>

Links:

[1] <http://eni-upstream.mit.edu/>