Alumni in Action Wael Almazeedi, MC/MPA '98



Wael Almazeedi, MC/MPA '98 and Harvard professors and students meet with UAE Minister of Energy, Suhail Al Mazroui (left) and walks with HKS student Mehul Jain, MPA/ID '17 and Louis Bacon Environmental Leadership Fellow (right, facing page) during the annual ELI policy field visit to the UAE on sustainable and alternative energy. January 2016.

ALUMNI Wael Almazeedi is CEO of FATE Consortium (Free Access To Energy), a former World Bank consultant and an HKS alumnus (MC/MPA 1998) from Kuwait. He reconnected with MEI in 2014 to serve as advisor to the annual Emirates Leadership Initiative policy field visit to the UAE on sustainable and alternative energy. Mr. Almazeedi joined us to talk about entrepreneurship, trends in the energy field, taking risks, educating emerging leaders and more.

On FATE Consortium...

FATE Consortium was initially created as a platform to demonstrate Space Solar Power technology. Designed to capture solar radiation in geostationary Earth's orbit (GEO) and beam the energy via long-distance, high-power wireless transmission to receiver stations on Earth, it can provides 24-hour electricity. We've been working on this project since 1984, and the tech-

"At FATE, we're trying to level the playing field."

nology is for the most part available now. However, there are immense barriers to implementation. As we've expanded our scope to other emerging energy technologies, we're always plagued by what I call "information asymmetry," meaning despite modern information overload, consumers do not have the *right* information to make informed decisions and policymakers don't have accurate information to set policy.

At FATE, we're trying to level the playing field to encourage technology developers to move away from centralized energy options toward distributed energy solutions. Still, these new solutions must work with existing infrastructure and be flexible as technology and societal attitudes evolve. We live in a dynamic world; the rate of change is unprecedented.

On being an entrepreneur...

Being an entrepreneur does not necessarily mean being involved in a startup. I have been an entrepreneur all my life, from my early years at Kuwait Petroleum Corporation and in other large, bureaucratic organizations. Being an entrepreneur means continuously challenging the status quo. Entrepreneurs must ask themselves: how can I best effect change in a system? Every entrepreneur faces a choice between effecting change from within or without, the former being the most difficult. Gifford Pinchot's 1985 book on "Intrapreneuring" tremendously influenced my early thinking on how I wanted to drive change.

To be an entrepreneur, you need a very strong work ethic and dedication to your beliefs, but enough flexibility to change course when proven wrong, which is often. You need to be prepared to fight – against ignorance, against entrenched ideas, against time. You need to focus on creating something much bigger than yourself to make it worthwhile for others. You need to commit time to reflect on and to synthesize what you learn, so that you can translate knowledge into impact.

On HKS Students and the UAE policy field visit...

It has been a privilege for me to participate in the past two UAE policy field visits and get to know these outstanding students—some of whom I continue to mentor as they navigate their own career paths. They are career-minded in a world where the concept of a career is being eroded by the "gig economy," a dangerous paradigm if not presented in the right context. Also, most of the students were professionals prior to coming to HKS and I learned a lot from them, as well.

My role as part of the field visit is to complement the activities and programs organized by MEI and CPL (the Center for Public Leadership) and to address any issues relating to the energy industry in the UAE or globally. Since energy accounts for a disproportionate share of the UAE economy compared to a typical OECD economy, I also address economic development models and the role of government in the economy. With technology increasingly becoming a change agent within global energy, discussions are steered toward how emerging technologies are shaping the industry's future.

"Being an entrepreneur does not necessarily mean being involved in a startup."

On the UAE's role in MENA...

The UAE has taken the lead in deploying solar energy technologies such as concentrating solar power (CSP) and photovoltaic (PV) and they are now starting to deploy demand-management technologies such as energy efficiency and demand response to reduce peak summer usage. As subsidies are reduced, citizens will have even greater incentives to change their habits. In all of this, education is paramount. Better educated consumers are better prepared to make informed decisions.

The experiences of public utilities such as the Abu Dhabi Water & Electric Authority (ADWEA) and the Dubai Electricity and Water Authority (DEWA), along with the Abu Dhabi Future Energy Company (Masdar), position the UAE to transfer valuable knowledge and recommendations to neighboring countries. Others in the GCC and MENA can and should learn from their model.



On the future of energy...

Energy storage is the Holy Grail. Once you commercialize storage technologies, particularly distributed storage, you change the dynamics of the entire industry. Right now, storing energy is expensive compared with burning fossil fuels to generate electricity, which is still needed to back up renewable sources. The challenge with renewables is they are intermittent. Grids are not designed to withstand the intermittency, especially when usage exceeds certain thresholds.

Based on the work that has been done, I'd say distributed storage will be commercialized within a decade. It's both incredibly exciting and extremely worrisome. I'm excited because a new, distributive energy paradigm is forming right in front of us that can empower consumers to decide. Yet, I'm worried because even though consumers' aggregate purchasing power will shape the emerging paradigm, they do not know this space well enough to make truly informed, independent decisions. I'm worried that new players entering the space could monopolize the paradigm. We must articulate a new system for consumers to acquire and make sense of the information they need for this transition to be successful and most importantly, sustainable. Are regulators awake? Are they prepared to pass legislation to inform and protect consumers? If not, what will civil society or the nonprofit sector do about it?

> For more on Wael Almazeedi, check out his website: http://www.isymmetry.energy

Mosaic 2016 Middle East Initiative 9