



Plug'n'Grow – leading the way to soilless farming in the MENA region

Imagine growing vegetable staples, such as lettuce and tomatoes, and using 90% less water, 40 to 60% less fertilizer and 96 % less land, while still achieving the same yield and the same, if not better, quality produce... And that's before taking into account savings in terms of carbon emissions in terms of carbon emissions, whether from the reduced use of farming equipment to significant reductions in inputs.

Plug'n'Grow is making this happen. Founded in 2019, and based in El Obour, about an hour's drive north of Cairo, the company already counts 22 employees and is making strides in addressing the critical issues of food security and water scarcity that arise from

desertification, urbanization, climate change, and an increasing population – starting in this part of the world.

Says Mostafa Hassanen, Plug'n'Grow's founder: "We provide the equipment and know how that enables growers to set up highly efficient 'food factories' that produce premium quality vegetables at competitive and affordable costs. By applying hydroponics, growers can achieve the highest output capacities per square meter and at the lowest production costs in the market, without trade-offs in terms of quality." Mostafa often uses the word disruptive in describing the technology that his company is leveraging to successfully address one of the greatest challenges facing humanity today. He sees hydroponics as a logical avenue to explore in a part of the world where water scarcity is a simple everyday reality.

Mostafa's ambition: to make this technology increasingly accessible to growers in the region. In this spirit, Plug'n'Grow takes a 360-degree approach to helping growers achieve the higher yields and better quality that are possible through hydroponics technology. From consultation services to assess the potential and requirements of a given operation to making farm management work for growers; from supplying operating materials such as seedlings, nutrition solutions and organic pest control products to comprehensive maintenance services – Plug'n'Grow has established a solid offering in record time.

"Plug'n'Grow has developed a simple and economical hydroponics solutions to maximize crop yield per water drop and effectively address growing food demand and water scarcity in the Middle East and Africa regions.

Finalist at Clim@ Scaler 2022

Plug'n'Grow is one of the seven start-ups that were selected from over 150 applicants to participate in Clim@ Scaler 2022, a four-month accelerator program designed for scaleup ventures in the Green for Growth Fund's target regions. "Being a finalist at Clim@ Scaler 2022 gives us the boost we need to secure our business model and ensure our foundations are solid enough for the next step," explains Nouran El Said, co-founder of Plug'n'Grow. The Clim@ Scaler program provides access to industry expertise, investor networks, potential corporate partnerships and grant funding to scale Plug'n'Grow's solutions. "We are especially looking forward to the opportunity of pitching to investors and corporate partners at the investor day Clim@ Scaler has set up for this autumn," adds El Said.



That's because Plug'n'Grow, as the name implies, is focused on delivering turnkey solutions in hydronics and aquaculture in the region. "We have the engineering capability and the farms completed so far are extremely successful showcases of our technology," remarks Mostafa. "And in addition to designing, developing and delivering turnkey growing operations, we cover optimal operational scenarios as well as troubleshooting, and provide tailored trainings for operators and staff for all systems."

Plug'n'Grow is enabling growers to not just optimize water and fertilizer usage, but also to plan and operate their farms with much greater predictability with regard to yield and profitability. "The economic benefits of technology adoption will support the fast development of the sector and its stakeholders, while achieving food and water security on the macro-levels," smiles Mostafa.