

STEPHEN HAYES, PH.D.

Tampa, FL
(402) 296-1532
stephenhayesphd@gmail.com

CEO | PRESIDENT | EXECUTIVE VICE PRESIDENT | CONSULTING PARTNER

HUMAN-CENTERED, BUSINESS-FOCUSED, AND TECHNOLOGY-ORIENTED

A dynamic and thought-driven leader with an impressive record of success transforming ideas into profits. Co-founded and grew an energy tech start-up from conception into a multi-million-dollar company.

Proven catalyst for change and a leader in the delivery of rapid corporate growth through innovation, process re-engineering, and intimate knowledge of the utility grid and renewable energy sector.

An innovative and out-of-the-box thinker determined to find ways to deliver more value to customers, accelerate business growth, and dominate markets.

Vaccination Status: Fully Vaccinated

AREAS OF EXPERTISE

Renewable Energy & Utility Grids • Energy & Environmental Policy Development • Government Regulations
• Strategic & Tactical Planning • Budget Management • Profit & Loss • Product Definition & Pricing •
Channel Development • Business / Trend / Competitive Analysis • Staff Training / Development • Mergers &
Acquisitions • Contract Negotiation • Public Speaking

CAREER HIGHLIGHTS

- Built and managed Microgrid Technology's leadership team in support of company culture and mission; defined strategic direction, roadmaps, and short and long-term objectives.
- Utilized academic research to architect energy solutions and design requirements for products that will enable utilities to adapt to the changing grid through a virtual power plant and an integrated DERMS platform that leverages Flexible Load Management
- Leveraged deep industry knowledge of microgrids and the utility grid to secure \$50 million in start-up investment over six years.
- Nominated to serve as Florida's PUC Commissioner by the Governor in 2021 but declined this honor opportunity.
- Gave hundreds of presentations to customers, dealers, and investors as well as conferences, symposiums, and trade organizations.

PROFESSIONAL EXPERIENCE

Microgrid Technology – Tampa, FL

2019 – Present

An energy company known for a category-defining smart electrical panel, microgrids, and energy resiliency solutions for consumers, home builders, businesses, and utility companies.

Co-Founder / President

DIRECT REPORTS – 10 LEADERSHIP TEAM | INDIRECT REPORTS – 40+

Provide oversight of all day-to-day operating activities including product development, funding, and financing, to working with utility companies. Articulate the organization's vision and develop strategies for achieving that vision. Directly engage with utility companies to collaboratively think through their changing business model and articulate how flexible load management and DERMS contribute to the changing grid.

CRITICAL CONTRIBUTIONS

- On track to achieve a 400% revenue increase by 2022 through the addition of multichannel sales.
- Collaborated with the CEO and other executives through risk/reward assessment, vetting, contract negotiation, and diligence which resulted in the successful acquisition of Samsung Lighting, a publicly-traded company.

STEPHEN HAYES, PH.D.

- Pioneered the extraordinary breakthrough OEM program that allowed our small, start-up company without a proven track record to ultimately win a large share of the market.
- Finalized an OEM contract with an industry leader that will generate \$9 million in revenue and \$350K NRE over 5 years.
- Worked closely with the CFO on budget and revenue projections and reported to the board of directors.
- Worked collaboratively with the CEO, president, and COO to ensure the successful integration of two distinct companies.
- Managed policy and the logistics of moving the entire company to remote work during the COVID-19 outbreak (2020) which included setting office and travel policy and strategically allocating resources for safe engineering development at home which maintained high morale and productivity.
- Gave dozens of high-impact presentations to an array of different investors from VC to ESG investors.
- Led the successful launch of new product initiatives including a utility channel, an electrical distribution channel, and a builder channel.
- Improved employee retention by instituting new hiring and employee onboarding processes. This included attracting exceptional talent, building a strong company culture, and collaborative teams.
- Company Awards 2021: Consortium for Energy Efficiency (CEE) Integrated Home Competition Special Recognition for resiliency for our Flexible Home Energy Management System; CE Pro BEST Award; Residential Systems Best of Show Award; TecHome Brilliance Award; TecHome Brilliance Award Energy Monitoring and Management; Connected Design Design Award; and the Residential Tech Today Innovation Award, Product of the Year. 2022 Mark of Excellence Award for Energy Management Product of the Year presented by Consumer Technology Association (CTA)

Tomorrow's Energy – FAYETTEVILLE, AR

2015 – 2019

An engineering-driven company known for smart electrical panels, microgrids, and energy resiliency solutions for consumers, homebuilders, businesses, and utility companies.

CO-FOUNDER / DIRECTOR OF SMART GRID RESEARCH & DEVELOPMENT

DIRECT REPORTS – GREW TEAM FROM 0 TO 50

Partnered in the strategic leadership and growth of an innovative, high-end renewable energy and utility solutions-focused software technology startup that eventually grew to generate millions of dollars in revenue each year. Led the development of an advanced flexible load management technology as well as microgrids for residences, businesses, and communities that employ flexible load management in combination with renewable sources of power generation, storage, and the grid.

CRITICAL CONTRIBUTIONS

- Helped build an innovative green energy company from humble beginnings, (i.e., a tiny two-person operation) that had grown to fifty employees and four offices across the country.
- Personally generated more than \$1.8 million in revenue through the successful sale of microgrids to seven customers in the first two years.
- Awarded the first patent outlined energy market algorithm for a virtual power plant based on flexible load management and aggregation server for a utility application.
- Architected and defined company product offerings that included Intelligent Power Panels, Scalable Microgrids, and a Utility Services Platform.
- Worked with three large utilities and several smaller cooperatives to launch and pilot a flexible load management product.

EARLY CAREER EXPERIENCE INCLUDES:

Served as a trusted partner and business advisor to companies and universities across the country consulting on their energy needs. Currently serving as Associate Professor at the University of Southern California,

STEPHEN HAYES, PH.D.

Berkeley, Director of Energy Education and Management / Lecturer of Energy and Engineering, Researcher at College of the Pacific, and Adjunct Graduate Faculty at University of California, Berkeley.

PATENTS

Methods for Creating Dynamic Nano; Grid and For Aggregating Electric Power Consumers to Participate in Energy Markets: [U.S. Patent Number 12953992](#)

Intelligent Circuit Breaker for Load Control: [U.S. Patent Number 10942310](#)

Energy Management System and Methods: [U.S. Patent Number P-011898-US \(Pending\)](#)

PUBLICATIONS

Nagel, D., Gautschi, D., Hayes, S. Global Energy System for Ten Billion People (Book in progress)

Hayes, S., and Peterson, M. (2013). Community Smart Grid Utilizing Dynamic Demand Response and Tidal Power for Grid Stabilization. Smart Grid and Renewable Energy. Volume 4, p. 465-472

Hayes, S., and Peterson, M. L. (2013). Small Organic Farm Renewable Energy Demonstration Project Based on Incremental Capital Investment and Community Participation. Journal of Agriculture, Food Systems, and Community Development. Volume 4, Issue 1, p. 141-154 <http://dx.doi.org/10.5304/jafscd.2013.041.002>

Hayes, S., Feldman, D., & Peterson, M. (2013). Human Ecological Approach to Energy Literacy through Hands-On Projects: An Essential Component of Effectively Addressing Climate Change. Journal of Sustainability Education.

Hayes, S. (2011) Renewable Energy as a Platform for Elementary Education. Connect Magazine. Volume 25, Issue 1.

Peterson, M., Hayes, S., & Rubin, J. (2009). Maine's climate future: An initial Assessment (Energy Section). University of Maine. G. L. Jacobson, I. J. Fernandez, P. A. Mayewski, and C. V. Schmitt, editors.

PRESENTATIONS

A list of presentations can be found on my LinkedIn profile. www.linkedin.com/in/stephenhayes

EDUCATION

University of California, Berkeley – Berkeley, CA 2013

PH.D. – ENGINEERING IN THE NATURAL SCIENCES

Thesis: A three-pronged approach to community-scale renewable energy: education, incremental capital investment, and smart grid technology

University of California, San Diego – San Diego, CA 2005

MASTER OF SCIENCE – MARINE BIO-RESOURCES

University of Colorado, Denver – Denver, CO 1995

BACHELOR OF SCIENCE – ELECTRICAL ENGINEERING