



Presentation to the Hydrogen Technology Advisory Committee

July 15, 2009

The Avāence *Hydrofiller* technology advantages:

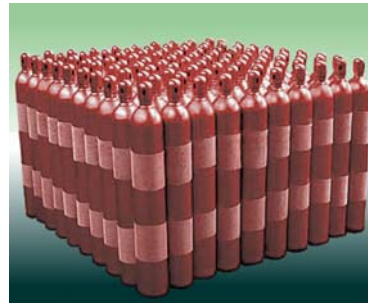


**Complete “Personal”
Renewably-Powered
Vehicle Fueling Station**

- Based on inexpensive alkaline electrolyzer technology
- Direct 2,500 psi production eliminates the need for compressors and conditioners in many applications
- Configurable for direct integration with renewable power sources
 - Zero CO₂ emissions “Well to Wheels”
 - Utilize grid sources as needed
- U.S. patent awarded and international patents pending
- Core technology applies across markets and applications

Hydrofiller Markets

**Near Term
Markets**



**Industrial
Hydrogen**



**Backup
Power**



**Industrial
Transport**

**Growth
Markets**

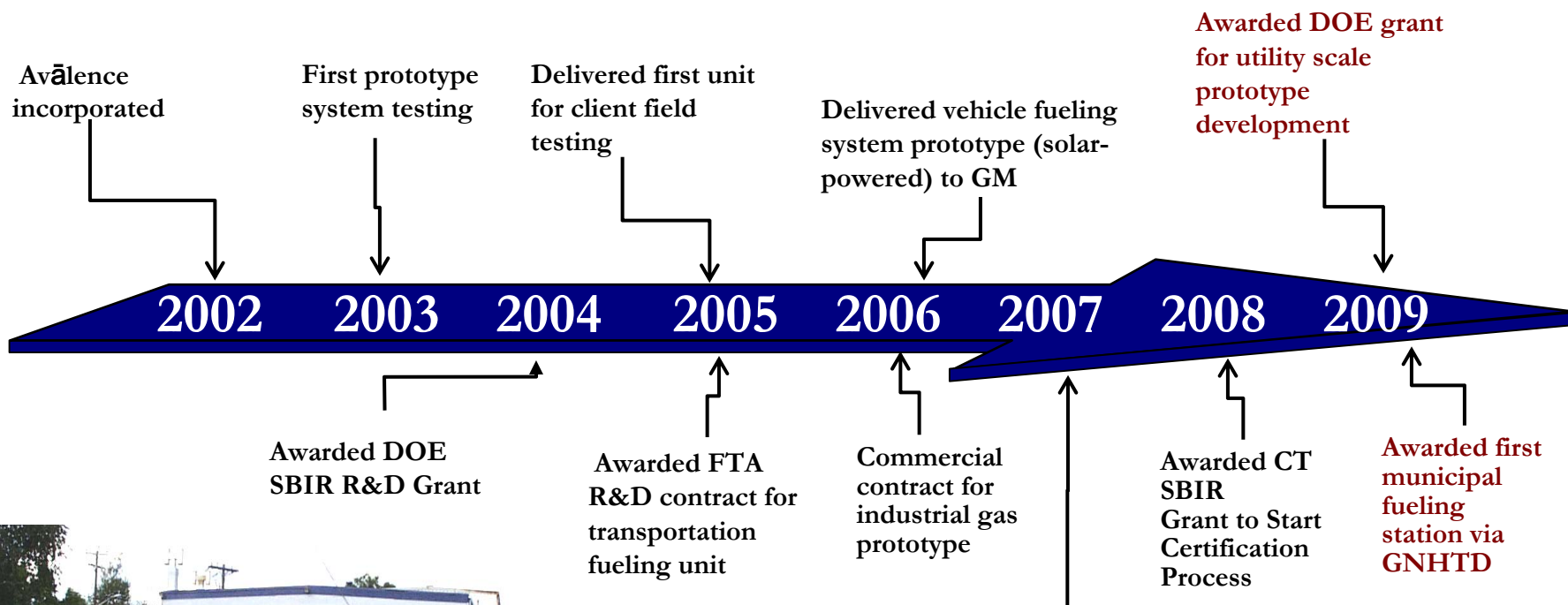


**Hydrogen
Fueling**



**Energy
Storage**

Company Milestones



Joint development of self-refueling backup power system with UTC Power

Company Facility in Milford, CT



Self-Refueling Back-Up Power System Development with UTC Power



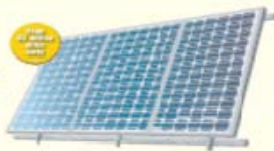
Energy Reinvented



How **Clean, Green Energy** is created.



Solar Energy



PV Array



Hydrofilter Electrolyzer



Storage Tanks



PureCell® Model 5
Power System



Customer

Renewably Powered Home Fueling System Development with GM



Solar Hydrogen refueling today



Continuity In Federal Programs Is Key

How We Got this Far:

- **Early Development Work on Core Technology and Distributed Scale Systems Funded Via Seed Investment and DOE SBIR Funding**
- **Angel Funding and Several Demonstration Projects with DOT, DOD, and Key Development Partners Positioned Technology for Commercialization**
- **Additional DOE Grant Received to Enlarge Distributed Scale Systems (kW input) to Utility Scale (MW input)**
- **CT State Funding Potentially Used for Obtaining Standard Equipment Certifications (CSA, CE, ...)**

What Is Needed Now:

- **Program Continuity from the Federal Government :**
 - ❖ **Complete Technology Development of Utility Scale Units**
 - ❖ **Continue Critical Technology Demonstration Projects**
 - ❖ **Reassure the Commercial Investment Industry**
- **Appropriate Sales Growth in Near Term Markets**

Contact Information

CEO:

Deborah Moss

Operations and Marketing

dkm@avalence.com

President:

Martin Shimko

Technology Development,
Sales, and IP Protection

mas@avalence.com



Original Prototype Unit With
> 15,000 hrs of Operation

1240 Oronoque Road • Milford, Connecticut 06460 • Tel: 203-701-0052 • Fax: 203-878-4123
www.avalence.com