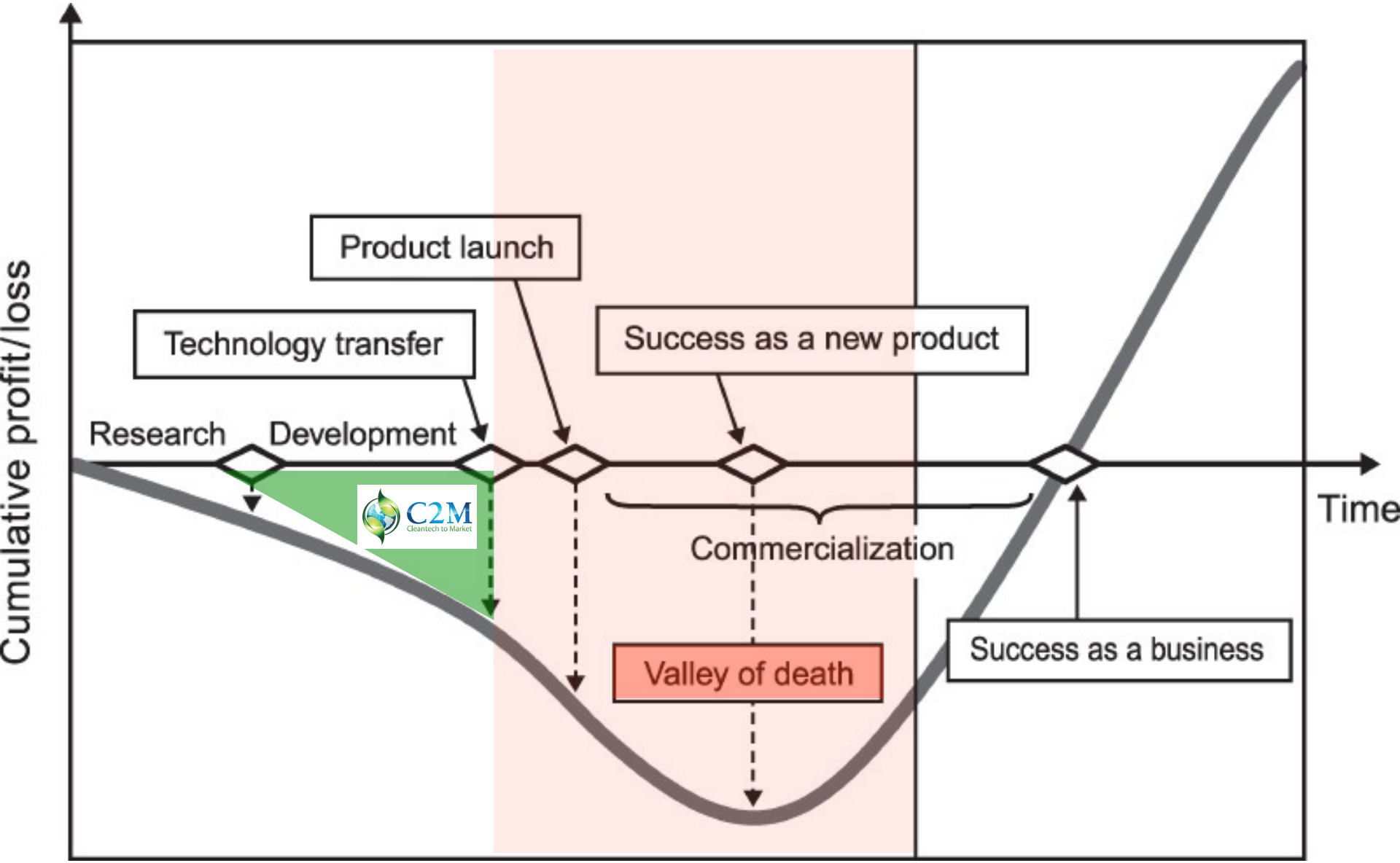
Key Gap: "Lab to License" Valley of Death



Key Finding: "Mission Driven" Focus Leads to a Predictable Set of Mistakes

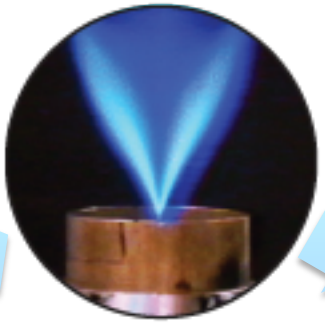
- Other entrepreneurs tend to be **business opportunity** driven
- Cleantech researchers and entrepreneurs tend to be **technology or mission** driven
- Leads to **predictable mistakes** that can be corrected through careful analysis
- **Solution:**
  - Surgical focus on **competitive value**
  - Realism about **product development cycle**
  - Selection of **winnable entry markets**

Business Rigor + Design Thinking Can Help Identify Paths to Commercial Success

- **C2M:** 5-year track record
- Haas **innovation** curriculum
- Teams from 20+ graduate programs
- 15-week **commercialization** analysis
  - 42 business factors
- Focus on **entry markets**
- **Paths** toward ultimate market
- Rigorous **product - market fit**

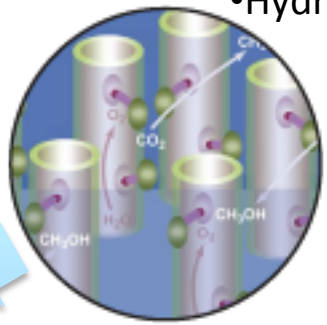
C2M Works Across the Carbon Cycle

C2M
Cleantech to Market



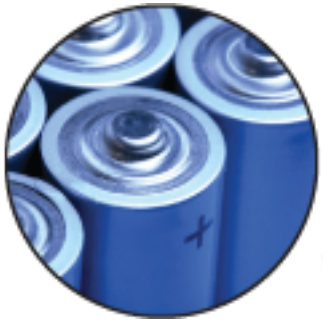
•Thermoelectrics
•Sulfides Solar
•Silicon Solar

•Carbon Capture & Sequestration
•Mems Sensor



•Artificial Photosynthesis
•Hydrogen from Water

•Algal Biofuels
•Cellulosic Biofuels



•Flow Battery
•Super Capacitor
•Printable Battery

•Zero Energy Buildings
•Energy Data Base
•Pico Cube

•Electrochromic Window
•Ventilation Controls

•Open ADR
•DR Refrigerators
•Building Gateway

carboncycle2.0

"A Steady Stream of Successes"

- PROJECT OUTCOMES
  - ✓ **20% incorporated** ($15M in investments, grants, awards, and revenue)
  - ✓ **47% continuing RD&D** ($25M in grants and other new funding)
  - ✓ **12% pursuing licensing** with existing companies
  - ✓ **9% part of DOE research hubs** (supported by $360M)
  - ✓ **12% redirected research** to increase commercially viability
- EMPLOYMENT & PUBLIC BENEFIT
  - ✓ C2M projects and alumni have **created 60+ new jobs**
  - ✓ **Placed 100+ graduates** into advanced energy & technology jobs