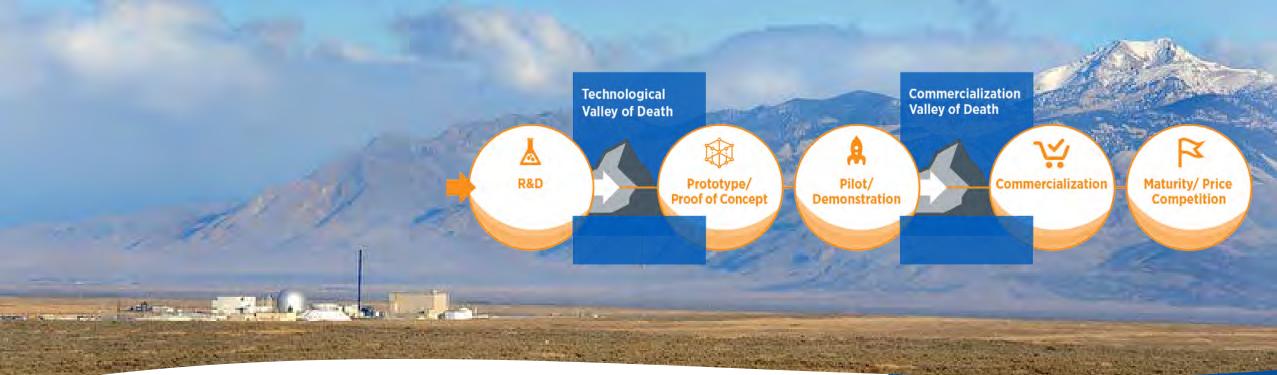
CIESN – Cleantech Integrated Energy Systems Network

INL's nuclear decarbonization incubator





The Problem

Technology Incubation Programs address under-invested, high impact technology areas

- Focus on technologies that have a large potential for a nuclear energy and environmental impact many of which have been ignored by the investment community due to technology, and regulatory/ policy barriers at entry
- Funds needed to develop and test technologies and access to the expertise to validate it are often insurmountable hurdles for startups. INL's technology incubation program sits strategically in this space, where other incubators and accelerators are unable to play
- The goal is to help start-ups over the valleys of death and speed nuclear decarbonization technologies to market

How Does Technology Incubation Work?

Month

0

Proposed Process

- Existing channel and new referral partners are leveraged to determine a list of recommended technology entrepreneurs in the nuclear/hybrid energy sector
- INL technical teams review, score, and down select top applicants
- Funding partner(s) reviews, scores, and further down selects
- External Advisory Board selects awardees to invite to participate in the program

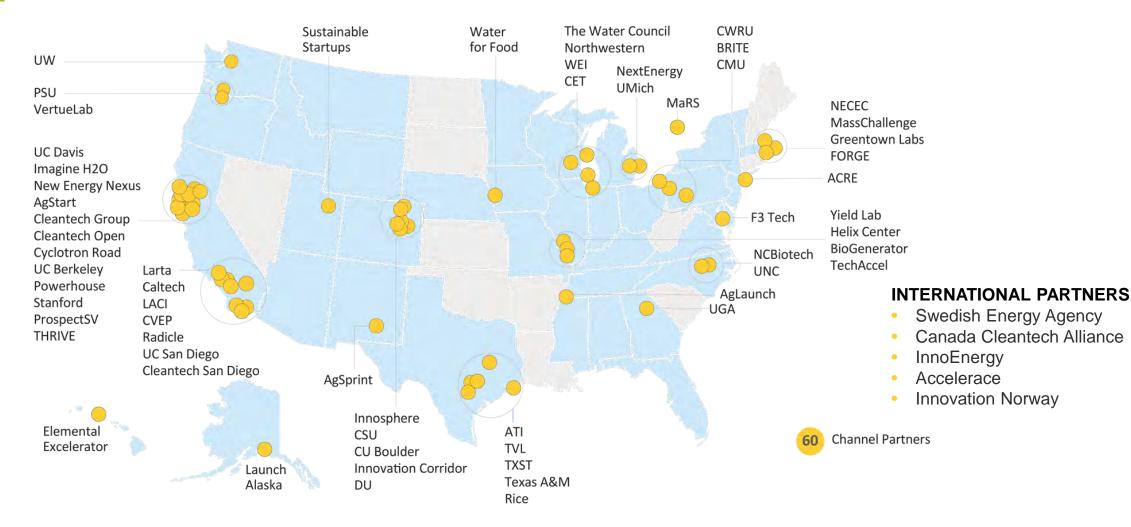
Awardee Companies

- Can receive up to \$450,000 for technical services in Phase 1
- May also receive up to \$50,000 for business related funds to support the technical projects
- Companies completing agreed milestones in Phase 1 may be eligible for physical testing with MARVEL

Programs are designed	ed to support technologie	s and startups at variou	s stages of development:

Program	Technology Status	Value Proposition	Funding	
Tier I: Bench Scale	 Conceptual stage with physical proof that the concept may work Development plans for prototyping and testing 3-5 years to market 	 Access to world-class researchers and facilities Further technology development 		
Tier II: Prototype	 Prototype available for testing and validation Plans available for development to final product Less than 2 years to market 	 Access to world-class researchers and facilities Testing and validation of prototype Funding level anticipated to be between \$50-\$500K dependent on 		
Tier III: Commercially Ready	 Production models available in limited quantity Less than 18 months to market 	 Access to world-class researchers and facilities Potential for beta demonstration Evaluation and support of deployment plan 	project needs	

Innovation Pipeline = Channel Partners



Fostering an Integrated Energy Ecosystem



SOURCE: NREL | 5

CIESN Technology Incubation

Program Overview

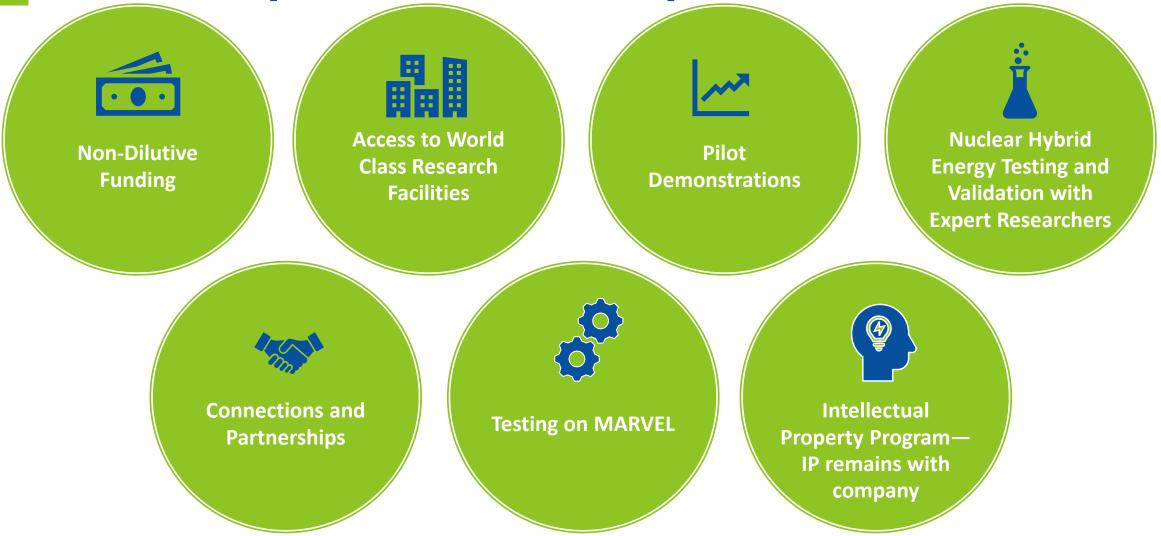
H24

H2 ELECTROLYZER

Heat & Electricity

ENERG

Value Proposition to Startups



Value Proposition to Sponsor

- Support for and engagement with an established international nuclear ecosystem
- Curated access to leading nuclear/hybrid energy startups
- Participation in a proven technology incubation program
- Low cost, efficient process to identify new innovations and investible opportunities
- Technical support from a world leading research institution
- Access to:
 - Intellectual capital
 - Facilities
 - Equipment
- Participation in awardee company decision making
- Global publicity and public relations support
- Invitations to participate in INL programs and events



Fostering a Nuclear Hybrid Energy Ecosystem

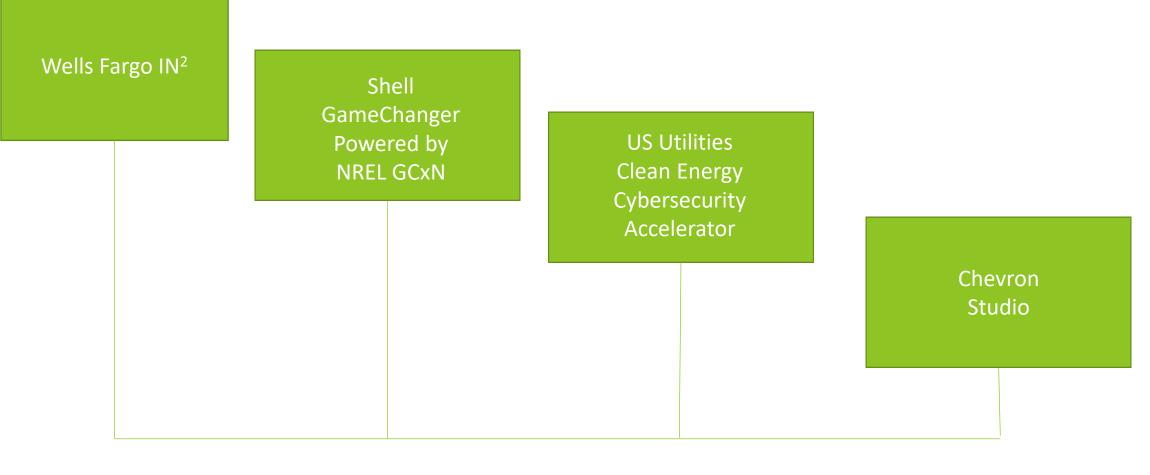


SOURCE: NREL | 9

Existing NREL Technology Incubation

Programs and Results

Technology Incubation Timeline



2014



Technology Incubation By The Numbers



Questions and Discussion