

## Ignite<sup>x</sup> DAC Accelerator



## BLACK & VEATCH

- Access to **Disruptive** Innovations
- Expand Portfolio of Solutions
- Explore New Markets

## IgniteX Startups

- De-risk technology
- Access to
- Technical & market expertise
- Network of Clients & Partners
- Engineering & Mentorship
- Accelerated growth

	RTI RTI LABORATORIES				BLACK & VEATCH					
	TRL 1	TRL 2	TRL 3	TRL 4	TRL 5	TRL 6	TRL 7	TRL 8	TRL 9	
Technology Maturation Plan	Idea	Lab	Technology	Pilot	Process Development	Viability Demonstration (1/100 <sup>th</sup> Scale)	Transition to Commercial (1/10 <sup>th</sup> Scale)	Commercial Scale Demonstration	Commercial Deployment	
Startup Activities and Objectives	<ul> <li>Basic Technology Research</li> <li>Basic science validated through peer reviewed publications and patents</li> <li>Lab scale applied research to reduce scientific risk</li> <li>Well defined value proposition</li> </ul>		<ul> <li>Technology development &amp; key unit operations</li> <li>Lab Scale, repeatability, quality, quantitative verification of process</li> <li>Bench/Prototype scale testing of technology</li> <li>Conceptual core technology process design development</li> </ul>		<ul> <li>Core technology demonstration &amp; all unit operations</li> <li>Development and utilization of TEA to inform optimization (technology, experiments)</li> <li>Pilot Scale with integrated tests producing samples of final product. Process Eng. Data gathering to inform scale-up</li> </ul>		<ul> <li>Demonstration scale plant (including all sub-systems) development, testing and final operation conditions</li> <li>Continuous integrated operation of 1/10<sup>th</sup> scale for 1,000 hours and data collection</li> <li>Document pilot performance and engage with independent engineer to obtain investor confidence</li> </ul>		<ul> <li>Detailed process model &amp; engineering deliverables to support project execution &amp; const. planning &amp; estimate</li> <li>1<sup>st</sup> commercial scale project development &amp; plant operations</li> </ul>	
Ignite <sup>x</sup> - DAC Accelerator Activities	Technology Review & Validation Preparation for Project Execution					or FEL-1 Project cution	Preparation for FEL-2 Project Execution	Project Exe Detailed Des	Preparation for FEL-3 & EPC Project Execution including Detailed Design, Construction & Commissioning	