## +\_

### **Bruce County PDC**

Bruce Innovates: Foundational Hydrogen Infrastructure Project Feasibility Study Status Update



November 19, 2020

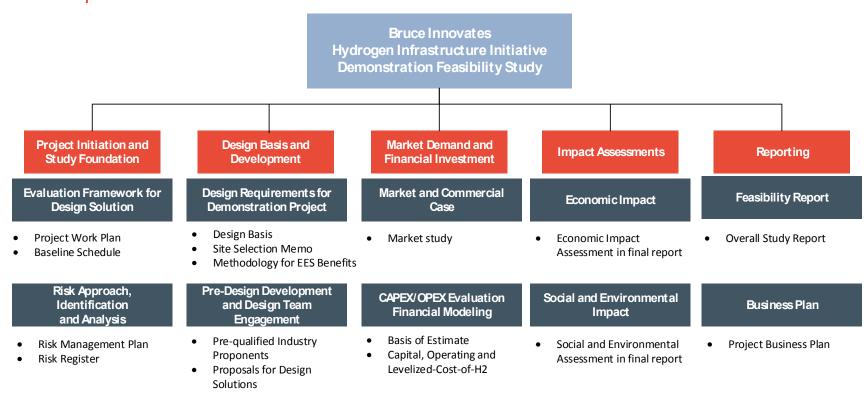


## Project Overview

- Hatch was selected as Consultant to support Bruce Innovates in advancing first stages of development for the Foundational Hydrogen Infrastructure Project
- Goals of the project include:
  - Developing a technical and economic feasibility study of a Power-to-Gas demonstration for hydrogen production and energy storage capabilities in Bruce County; and
  - Advancing project planning for initial demonstrations of hydrogen technologies.



## Scope of Work





## Progress Update

### **Work Package 1 Project Initiation and Study Foundations**

Work Package 1.1 Project Initiation and Evaluation Framework for Design Solution

Complete

- Project Execution Plan / Work Plan
- Baseline Schedule

### Work Package 1.2 Risk Identification and Analysis

Risk Management Plan and Risk Register (Appendix to Feasibility Study)

Risk Workshop complete. ongoing risk register development

### **Work Package 2 Design Basis and Development**

### WP.2.1 Technical and Financial Requirements Established for Demonstration Scale

- Design Basis (Appendix to Feasibility Study) and Scope of Work for Demonstration Project
- Short List of Potential Sites Established (Technical Memo/Minutes of Meeting)
- Methodology for EES Benefits and Evaluation Framework/Matrix

**Initial versions complete** 

**In progress** 

**Under review** 

### WP.2.2 Pre-Design Development and Design Team Engagement

- Pre-qualified list of Industry Proponents;
- Proposals for Design Solutions for Demonstration (Provided by Interested Design Teams)

Engaged with industry vendors



# Project Update cont'd

### **Work Package 3 Market Demand and Financial Investment**

### Work Package 3.1 Market and Commercial Case

• Market Demand and Commercial Case, summary in Feasibilty Report

#### Work Package 3.2 CAPEX and OPEX

- Basis of Estimate Memo
- Summary of CAPEX, OPEX and levelized cost of H2 production for Feasibility Report

### **Work Package 4 Impact Assessments**

### **WP.4.1 Economic Impacts**

• Economic Impact Assessment component of Feasibility Report

#### WP.4.2 Social and Environmental Impact

Environmental and Social Impact Assessment component of Feasibility Report

### **Work Package 5 Reporting**

- Overall Feasibility Report
- Business Plan Document



**In-Progress** 

## Schedule

Evaluation Framework for Design Solution

Risk Approach, Identification and Analysis

Design Requirements for Demonstration

Pre-Design Development and Design Team Engagement

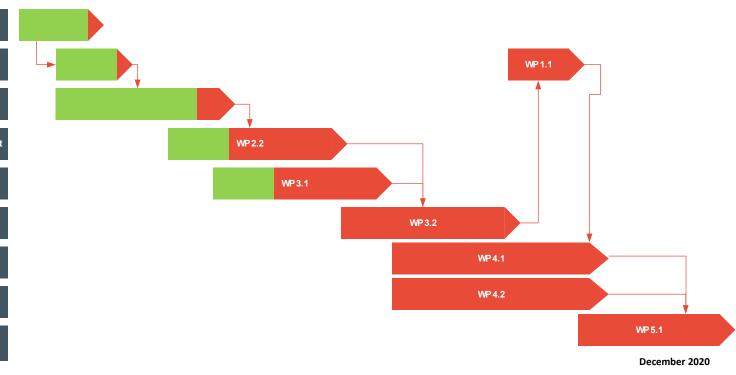
Market and Commercial Case\*

CAPEX/OPEX Evaluation Financial Modeling\*

Economic Impact

Social and Environmental Impact

Feasibility Report & Business Plan





# Next Steps

- -Finalize WP2 deliverables
- Solicit vendor feedback
- Complete market study
- Begin costing and financial evaluation



