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Bruce County PDC

Bruce Innovates: Foundational Hydrogen Infrastructure Project Feasibility Study Status Update



December 17, 2020

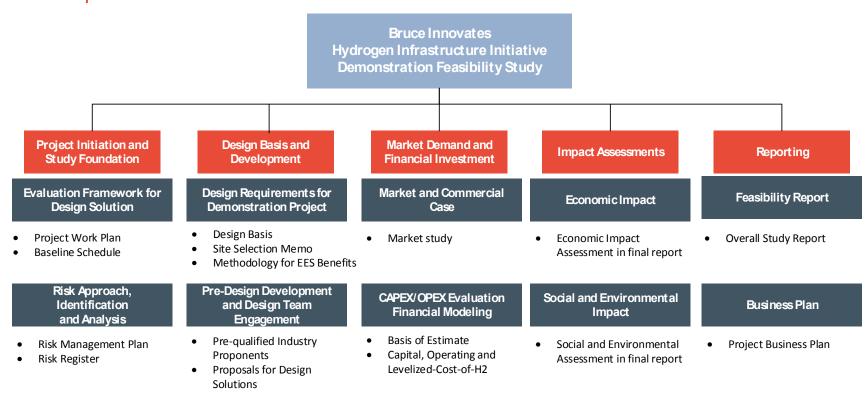


Project Overview

- 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)

Budgetary quotes received from 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

In-Progress

Work Package 4 Impact Assessments

WP.4.1 Economic Impacts

Economic Impact Assessment component of Feasibility Report

In-Progress

In-Progress

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

First draft of feasibility report targeted by end of 2020



Schedule

Evaluation Framework for Design Solution

Risk Approach, Identification and Analysis

Design Requirements for Demonstration

Pre-Design Development and Design Team Engagement

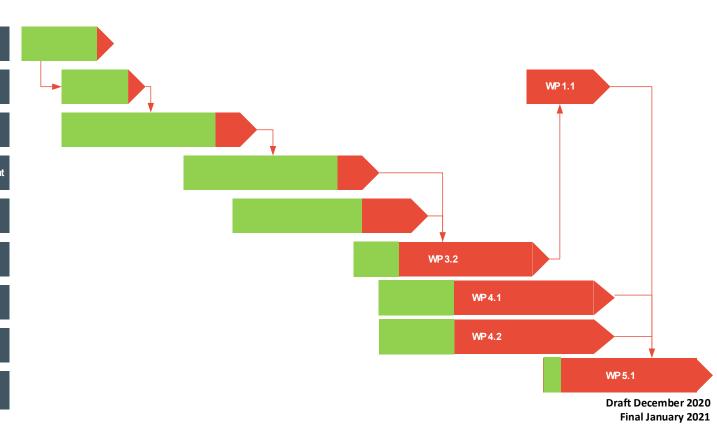
Market and Commercial Case*

CAPEX/OPEX Evaluation Financial Modeling*

Economic Impact

Social and Environmental Impact

Feasibility Report & Business Plan





Next Steps

- Complete market study
- Financial analysis using industry/vendor feedback
- -Complete EES impact assessments



