

1

DESIGNING AND BUILDING THE PILOT PLANT FOR THE CONVERSION OF CO TO NAPHTHA

2

OPERATING THE PILOT PLANT FOR RESEARCH AND PRODUCT VALIDATION:

A

Execute a test plan for the conversion of CO to naphtha on industrial sites in Ghent and Ijmuiden

B

Determine the quality of the produced naphtha

3

SUPPORTING RESEARCH: DEVELOP NEW TECHNOLOGIES TO SEPARATE CO AND N2

4

ANALYZE THIS NEW TECHNOLOGY & VALUE CHAIN FROM A SYSTEMS PERSPECTIVE

A

Identify the preconditions necessary for the development of the Steel2Chemicals value chain, such as:



Targets for technology development (conversion rate, energy efficiency, etc)



Infrastructure (e.g. regional/national grids for green hydrogen, CO2, etc)



Regulatory context (e.g. CO2 tax)

B

To achieve this, various tools are used, such as a lifecycle analysis (LCA), a technical-economic assessment (TEA study) and optimization models to find optimal solutions within a predefined set of preconditions / parameters

