Hiroshima University

HIROSHIMA UNIVERSITY

Carbon Recycling

Background

- · Realization of sustainable resource and energy use
- · 2050 carbon neutral



H₂

Green H2

Supply

Carbon recycling

Introduction

Technology development and demonstration

Methanation experiment

Process system design and optimization

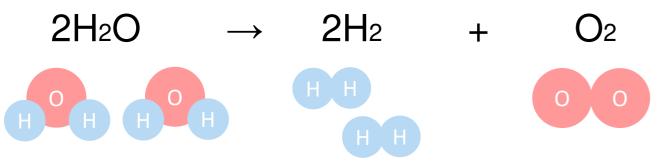
System analysis using simulation tools



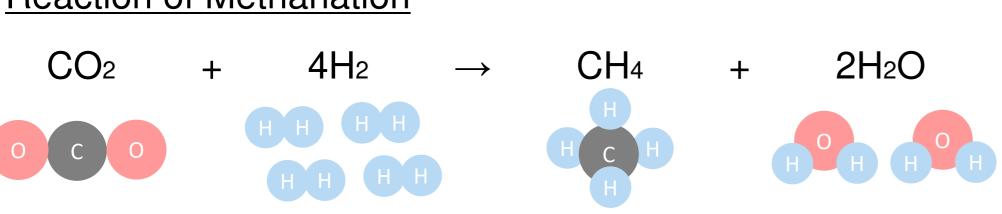
Matching local hydrogen production and carbon recycling

Reaction process

Reaction of H₂O electrolysis



Reaction of Methanation



Local industry/society

1Technology development and demonstration

Methanation Bench-scale experiments on methanation with electrolytic hydrogen



Water electrolysis

Methanation Equipment

2 Process system design and optimization

