

CRI: ready to lead the way in Power-to-X systems

Synthetic fuel is required to reach **100%** base-load **renewable power supply**

A liquid is the optimal **energy storage** and **green fuel**

CO₂-to-methanol is the most efficient method to produce green liquid fuel

CRI is **#1 globally** in CO₂-to-methanol

CRI is a **turn-key provider** of production plants

Our synthetic carbon cycle



CRI Power-to-Liquids technology



CRI in a nutshell

Start-up in 2006 in Iceland

Private equity financed LLC

40 people in Iceland and China

Experienced team covering full value chain

Designed, built, operates 4000 t/yr CO₂-to-methanol plant

Building on more than 12 years full value-chain experience

0.001 t/d

▶10 t/d



Pilot plant and lab



Industrial plant



Working w. RWE, SSAB



▶150-300 t/d

Project pipeline

2021



Sales and advocacy

2007

2012

2019

2008



Some of CRI global activities





Our edge: One step from CO2 to liquid fuel – reducing cost



CRI George Olah CO₂-to-methanol plant, Svartsengi, Iceland

Power plant

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Logistics

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Electronics

Operations

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Compression

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THE R. P. LEWIS CO.

First commissioning:2012Upgrade::2015Nameplate capacity:4000 t/yr methanol CO_2 conversion:5600 t/yr CO_2 Electrolysis:6 MWe base-load

EU/EEA will demand large increase in advanced bio and electrofuels

EU regulatory framework according to Renewable Energy Directive (RED)



New directive (REDII) mandates 14% share of renewable energy in transport by 2030

Crop based biofuels will be capped at actual consumption in 2020, increase must come from waste or electricity

French « PPE » objectives for advanced renewable fuels

Injection dans les réseaux	2023	2028
Filière essence (en %)	1,8	3,8
Filière gazole (en %)	0,85	3,2

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Comparing CRI's CO2-to-methanol to base case





Comparing 100% EV to base case



Heavy duty and range will still require fuel



Comparing CRI's CO2-to-methanol to EV



CRI ETL option





Emissions-to-Liquids contribution to reduction of CO₂ emission







Methanol: the most versatile hydrocarbon

*gas at ambient pressure



1mm

EN228 gasoline blends framework





Routine blending of methanol in gasoline



Link: <u>http://www.greenergy.com/uk/quality</u>



Blending of methanol in EN228 gasoline





Ready to realize power-to-x at scale

- Building CO₂-to-methanol plants since 2010
- Completed engineering studies for plants utilizing H₂
- We can be a one-stop shop for CO₂-to-methanol plants
- Trained technology and project management team
- Key equipment providers already vetted
- Expertise in renewable fuel markets and regulations
- Established distribution channels for offtake



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