



**Researching and sharing global
best practices in sustainable
development since 2003**

44 International Study Tours, 850 Participants from OR and WA

(from March 2004 through Sept 2023)



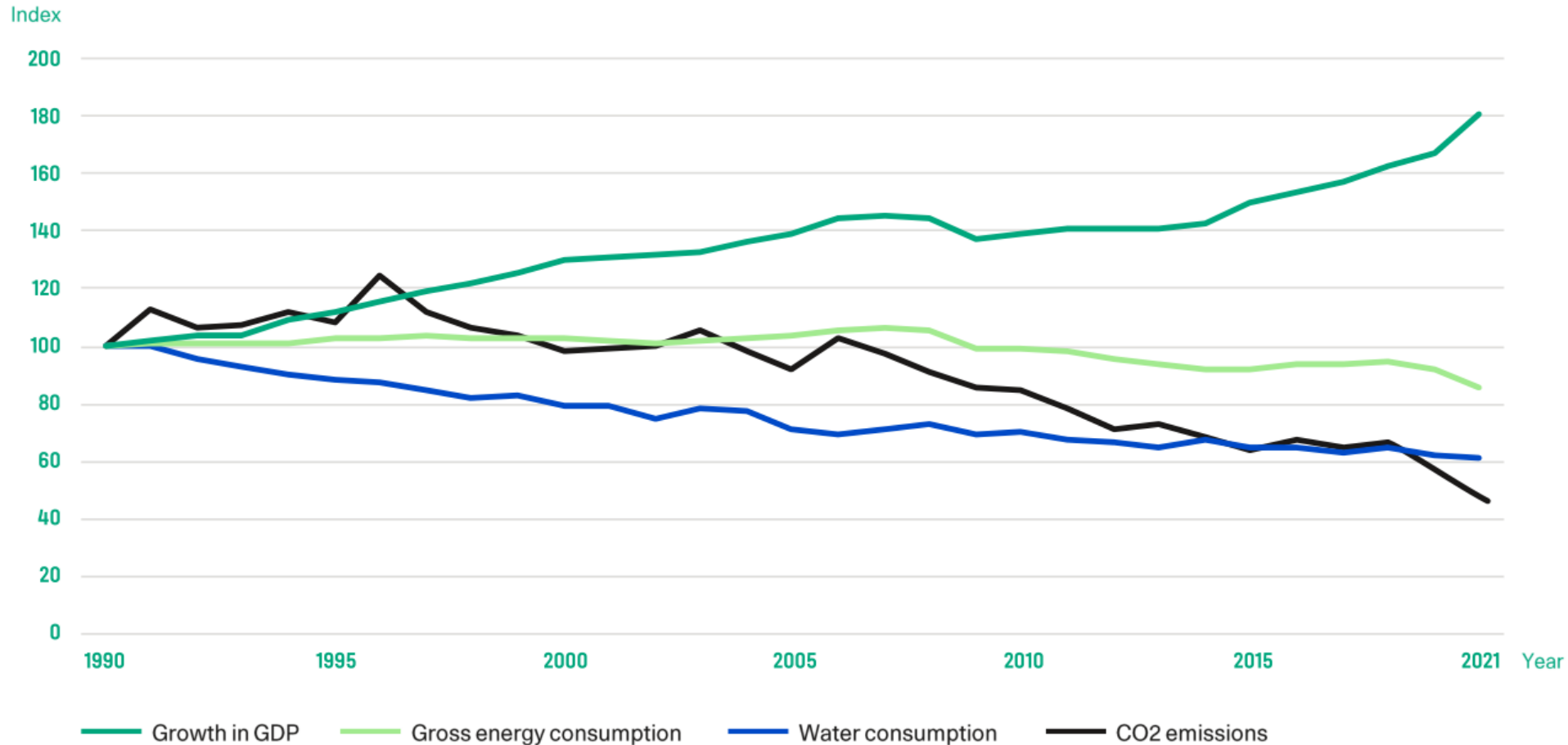


Denmark is the most positive view of the future that we have

- Many similarities to the Pacific NW
 - Size
 - Standard of living
 - Urban/rural
 - On the sea
 - Environmental ethic
 - Entrepreneurial/export oriented
- Big picture thinking creates unique solutions
- All sectors/political parties are in alignment about challenges such as climate change

Why Denmark?

Denmark's Green Transition



62%
growth in GDP

-11%
gross energy consumption

-39%
water consumption

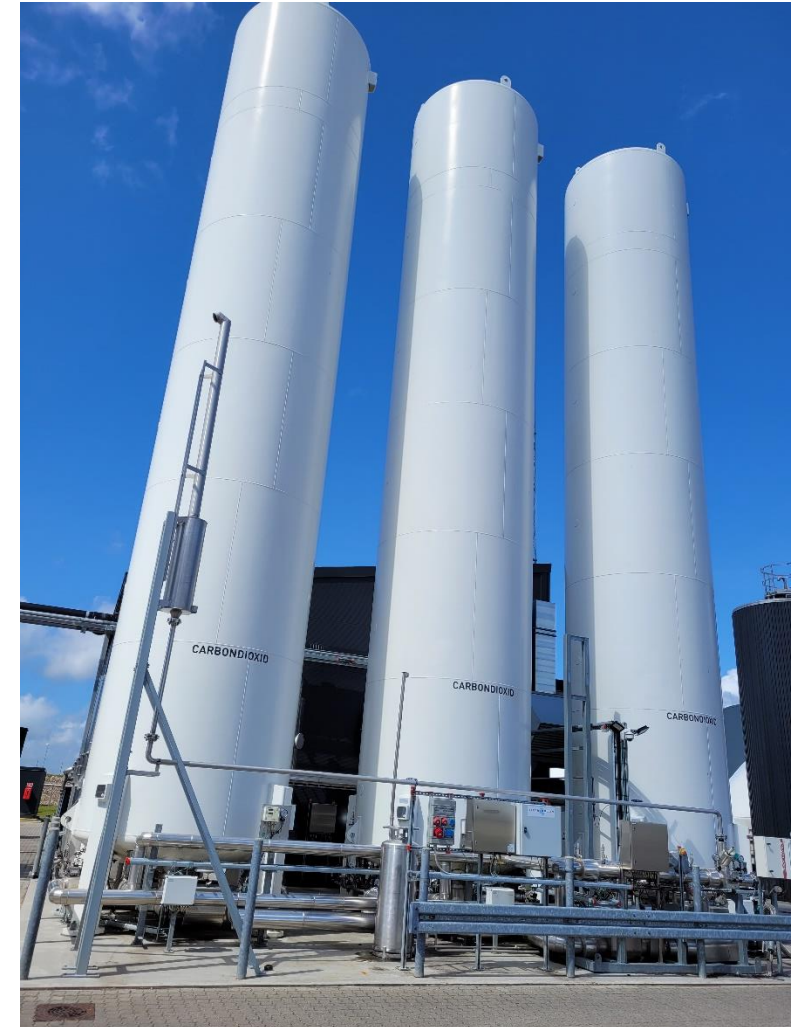
-43%
CO2 emissions

Decarbonizing the Gas System

Renewable Natural Gas

Carbon Capture

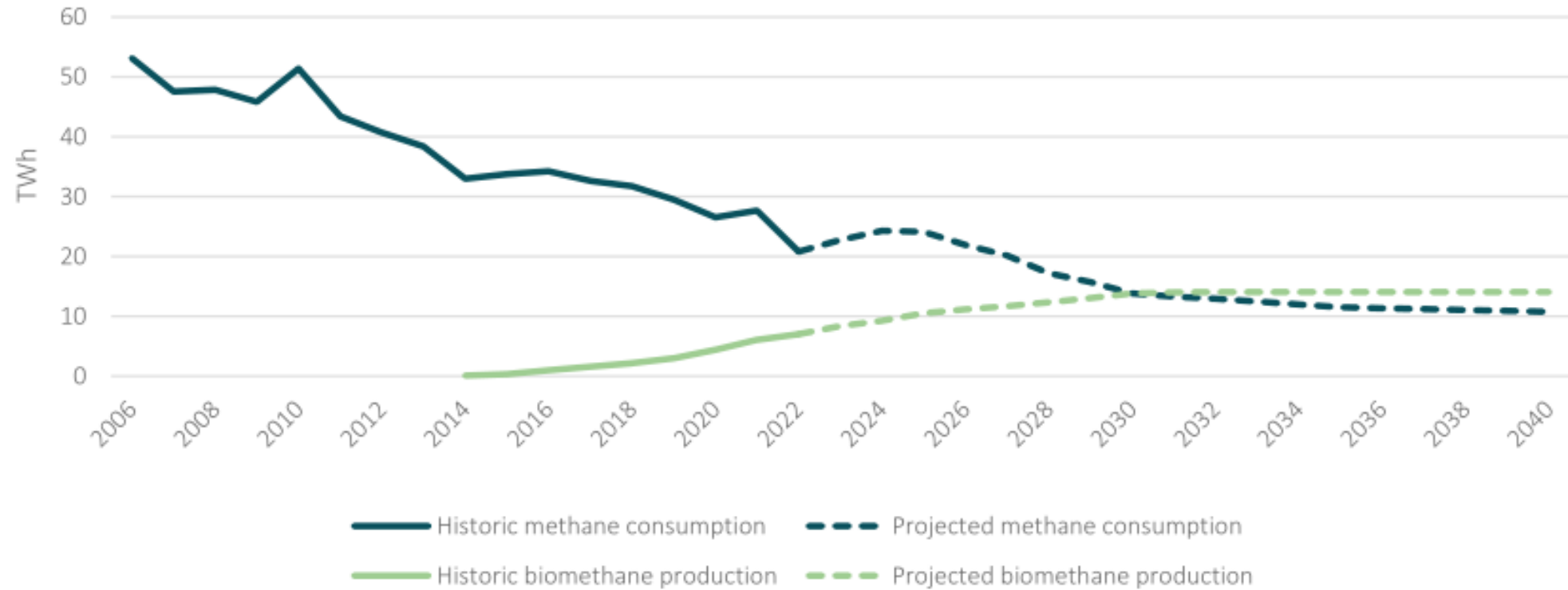
Hydrogen Economy (Power-to-X)



More than 40% of the supply in the national gas grid is now RNG



Danish Biomethane Consumption and Production



Nature Energy Korskro

Production: 1,274 million ft³ gas per year
Biomass capacity: 1.1 million Short tons per year

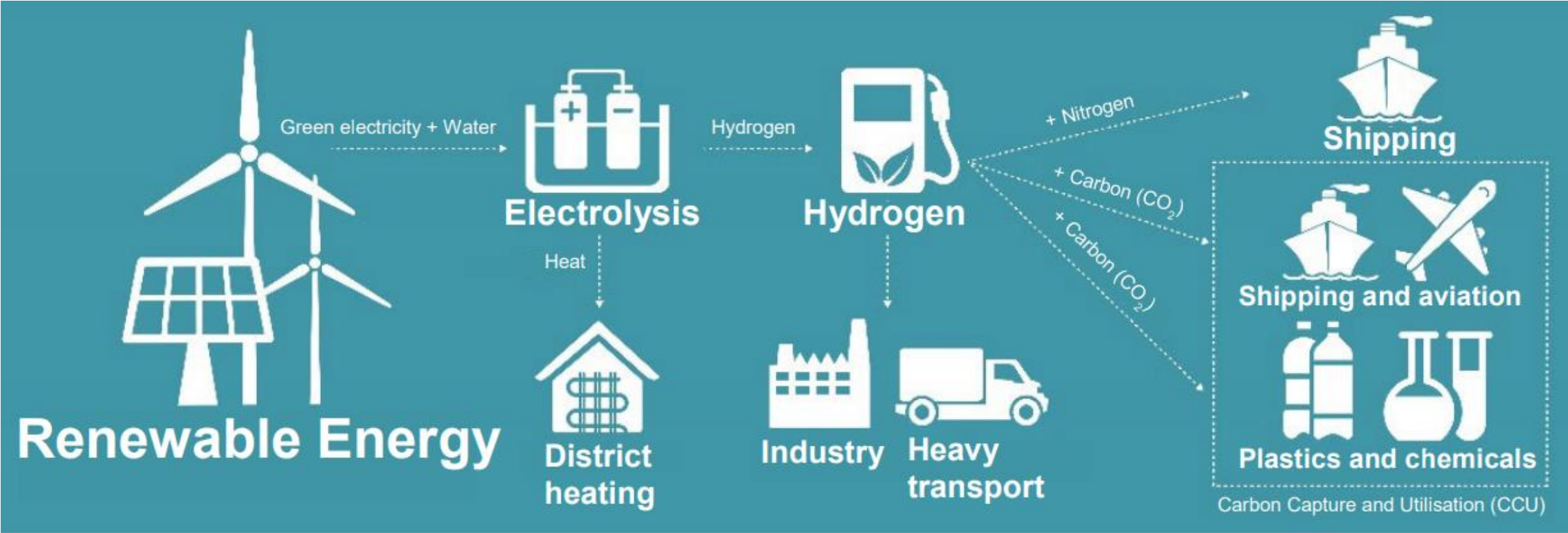


Carbon Capture

Microsoft has signed an agreement to purchase 250k tons of carbon removal per year over 11 years from one power plant



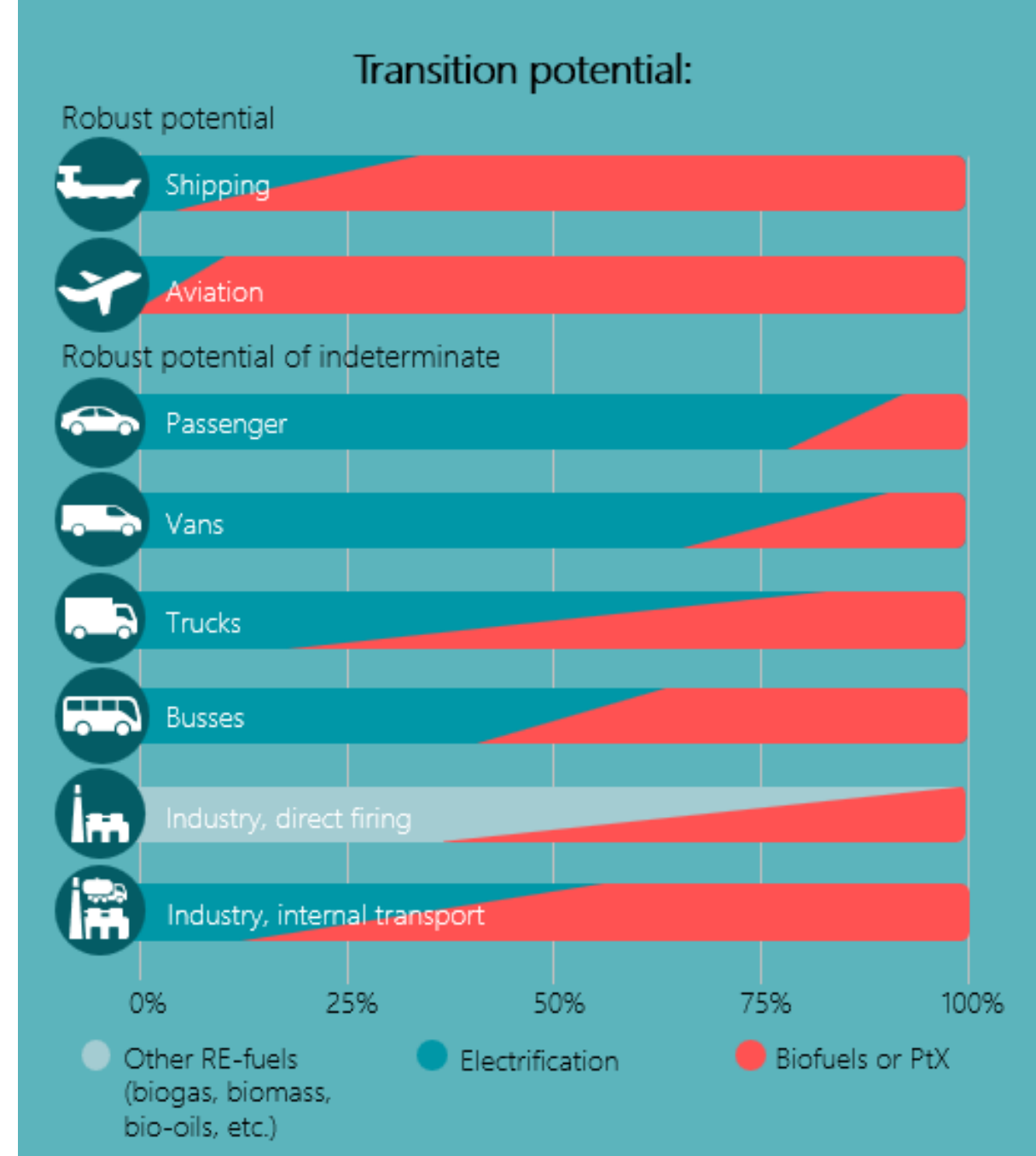
Power-to-X



Green electrons in and green molecules out

Role of P-to-X

- Green hydrogen and e-fuels are expected to have a dominant position within shipping and aviation.
- Will play key role in industry and heavy transportation



GreenLab

Located at the intersection of national gas and electricity grids

- Existing
- In progress
- Opportunity

GreenLab supply

- Power
- Water
- Heat/Steam
- Instrumental Air
- Nitrogen

Shared energy/ressources

- Methanol
- CO₂
- Hydrogen
- Surplus PtX heat for District heating
- Heat



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Envisioning Better Cities



**A Global Tour
of Good Ideas**



ORO

