



# GreenLab

Green & circular energy park – Technology enabler – National research facility

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**Christopher Sorensen, CEO** – GreenLab A/S, Skive, Denmark  
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**GreenLab**



# CLIMATE?







# ASPIRE?







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# The components of GreenLab's "no waste" ecosystem



## GENERATE

We generate sustainable energy for our partners

## TRANSFORM

The green energy is stored in all its forms:  
Electricity, heat, gas and electrofuels

## SHARE

The SymbiosisNet™ is an intelligent grid of energy and data that will let our companies share their surplus energy

**The traditional approach to saving energy has been  
to optimize within each sector**



**GAS  
SECTOR**



**FUEL  
SECTOR**



**HEAT  
SECTOR**



**ELECTRICITY  
SECTOR**



- Existing
- In progress
- Opportunity

GreenLab supply

- Power
- Water
- Process heat

Partner specific supply

- Instrumental Air
- Nitrogen

Shared energy/ressources

- Methanol
- CO<sub>2</sub>
- Hydrogen
- Surplus PtX heat for District heating
- Heat





# We are a green solution facilitator





# GreenLab Research Missions

VILLUM FONDEN



- 01** Development of the design manual for the green industrial clusters of the future
- 02** Successful optimization between fluctuations in renewable energy, consumption flexibility with industry and infrastructure costs for storage and conversions
- 03** Demonstration of valuable sector integrations that can show the way to scalable initiatives for industry in the rest of society





A PART OF WATCH MEDIA

# ENERGYWATCH

WEDNESDAY  
1 NOVEMBER 2023

ENERGY COMPANIES

OIL & GAS

RENEWABLES

CLEANTECH

POLITICS & MARKETS

21.12.2022 | kl. 12.01 ENERGY COMPANIES

## Norlys invests a quarter of a billion in green pioneer project

The green pioneer project, GreenLab Skive, is now receiving its largest capital injection to date in the form of a quarter of a billion Danish kroner from Norlys. With this funding, they are now on the verge of a solution that could kickstart a new Danish export adventure, says GreenLab's CEO.



**NORLYS**

**SPARVESTFONDEN**



Attracting investment in  
the last year:

350mDKK (50mUSD)

60mDKK (9mUSD)  
Innovation Fund

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# THE GREENLAB TEAM











FOLKETINGET

**By:** Minister of Climate, Energy,  
and Utilities, Lars Aagaard

**Committee:** Committee on  
Climate, Energy, and Utilities

**Session:** 2022-23 (2nd session)  
**Status:** Confirmed

# L 37 Proposal for a law amending the Electricity Supply Act and the Electricity Tax Act.

Implementation of various agreements on green transition, including parts of the power-to-x agreement of March 15, 2022.

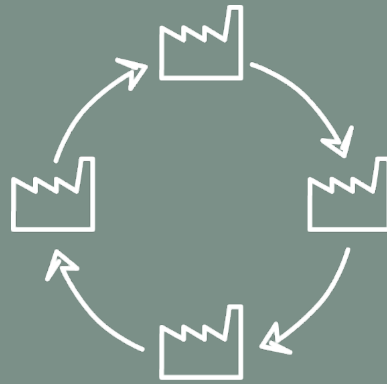


# Green and circular industrial clusters

## a model for sustainable growth



**Optimisation of energy through  
co-location**



**Circular economy and  
sector integration**



**A replicable model designed to  
scale-up and globalise**



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION



GLOBAL PROGRAMME  
HYDROGEN **IN** INDUSTRY



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION



GLOBAL PROGRAMME  
HYDROGEN **IN** INDUSTRY



## GREEN HYDROGEN INDUSTRIAL CLUSTERS GUIDELINES



# Manifesting nature's full potential means working for a just green transition

- »»» Danish Ministry of Foreign Affairs, USDA, GreenLab collaboration
- »»» Co-creating rural development
- »»» Working together to create new value





# Social Impact

**+3 bDKK**

Investments

**+150.000**

Construction hours

**+110**

New FTEs

**+8.000**

Hotel stays

**76%**

Of citizens in Skive find  
GreenLab important for  
the development of the  
municipality

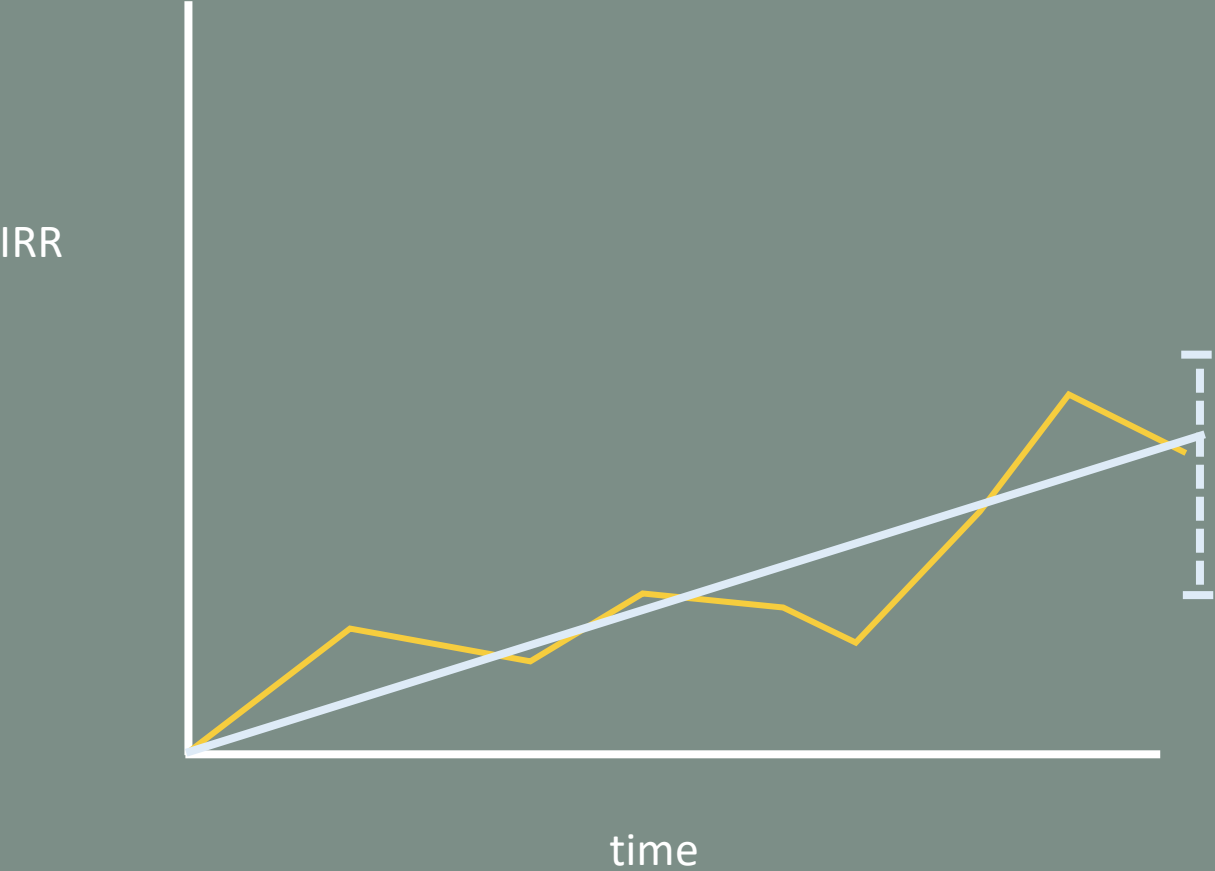


# WHAT IS VALUE?





# Are we done...?



**LET'S CREATE  
A POWER SHIFT**

An abstract geometric pattern consisting of numerous interconnected triangles of varying sizes, rendered in a light gray color, spans the bottom third of the image.