October 2023

Capture.Now™

Transforming carbon into opportunities

Technip Energies at a glance

Listed on
Euronext Paris
Stock Exchange

Headquartered in
Paris

65
Years of operations

€6.4B
Full year 2022 adjusted revenue

A leading Engineering & Technology company for the Energy Transition

€18.9B
Backlog at end June 2023

~15,000
Employees in 35 countries

25+
Leading proprietary technologies

450 projects
Under execution

A leading Engineering & Technology company for the Energy Transition

Gas & Low Carbon Energies

- LNG
- Blue H_2 & derivatives
- Offshore
- Early Engagement Gas

Sustainable Fuels, Chemicals & Circularity

- Ethylene
- Biofuels, fuels & petrochemicals
- Biochemicals & circularity

Decarbonization Solutions

- CO_2 management
- Green H_2 & Power-to-X

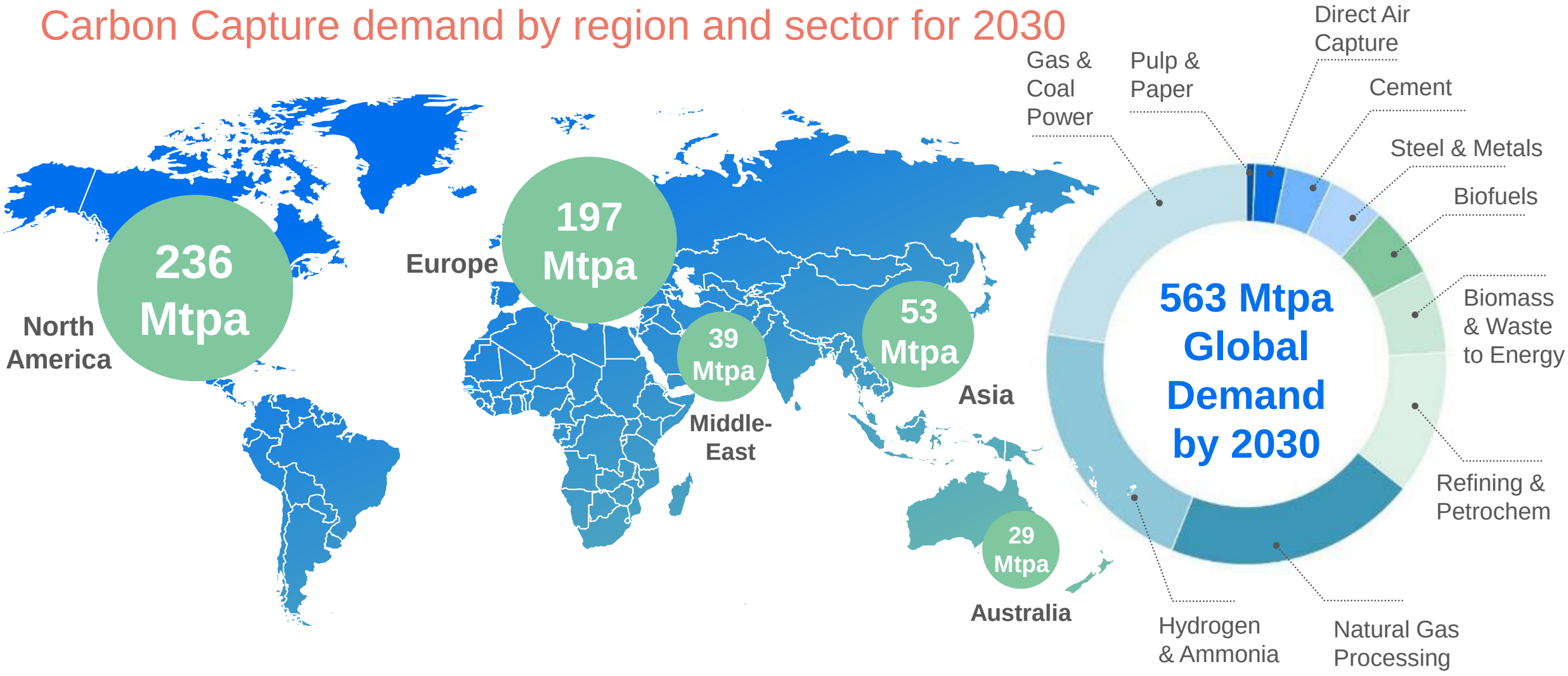
T.EN X Consulting & Products

- Genesis
- PMC - Project Management Consultancy
- ALE - Asset Lifecycle Excellence
- Loading Systems

One T.EN Delivery global organization

World outlook for 2030

Carbon Capture demand by region and sector for 2030



Source: Rystad Energy, CCUSCube, August 2023

Capture.Now™
Transforming carbon into opportunities

Leveraging 65 years of proven expertise delivering reliable and robust solutions.

50+

CO_2 amine-based removal systems

>30 Mtpa

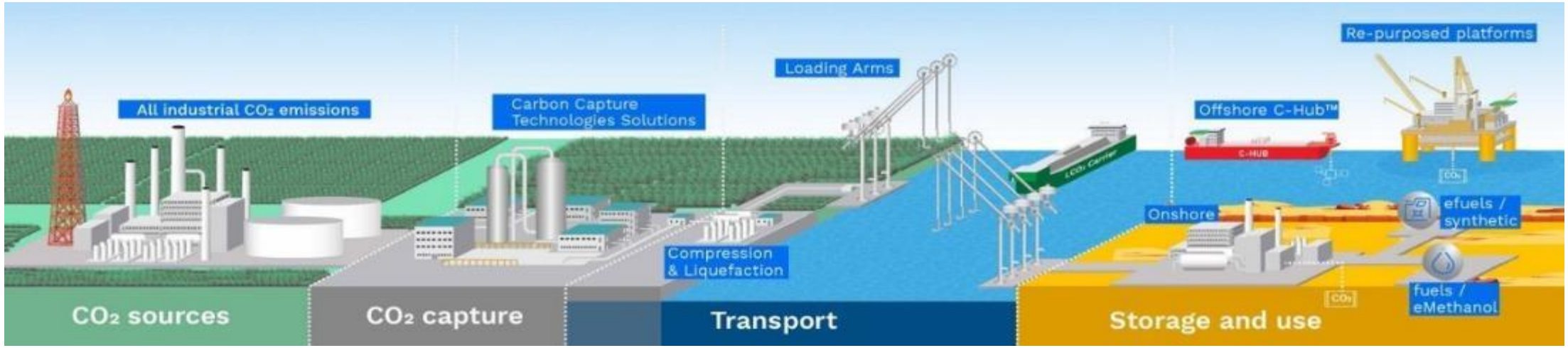
Carbon to be captured or avoided*

*ongoing FEED & EPC projects

20+

Ongoing FEED and EPC projects

Capture.Now™, our offering across the CCUS value chain



Pre-combustion

- Blue H2 by TEN™
- CO_2 Capture for Gases (syngas, natural gas, refinery off-gases, …)

Post-combustion

- Flue gas pretreatment
- Canopy by T.EN™ & other capture solutions

Transport

- CO_2 Compression & Liquefaction
- CO_2 Terminals
- CO_2 Loading Arms
- CO_2 Pipeline Design

Storage and use

- E-fuels (e-CH4, eMethanol, e-kerosene,…)
- Other Utilization Solutions
- DAC Technology (Calciner)
- Offshore C -Hub™

SUPPORTING CLIENTS FROM EARLY STAGE TO TURNKEY DELIVERY AND BEYOND

- Project development, Advisory, feasibility
- Energy Efficiency
- Financing solutions
- Engineering, procurement, construction
- Digital Services
- Project Management Consultancy
- Operations & Maintenance services

T.EN TECHNIP ENERGIES

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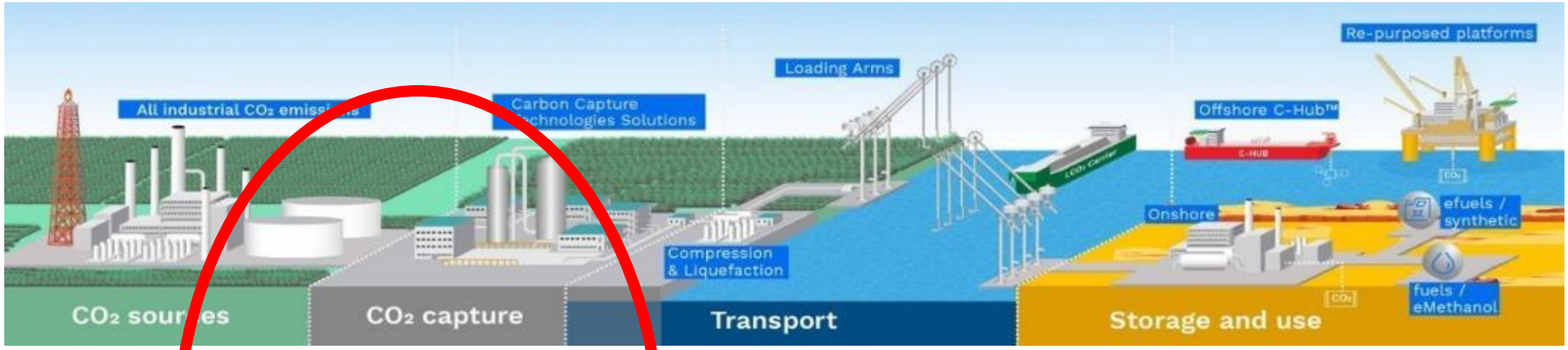

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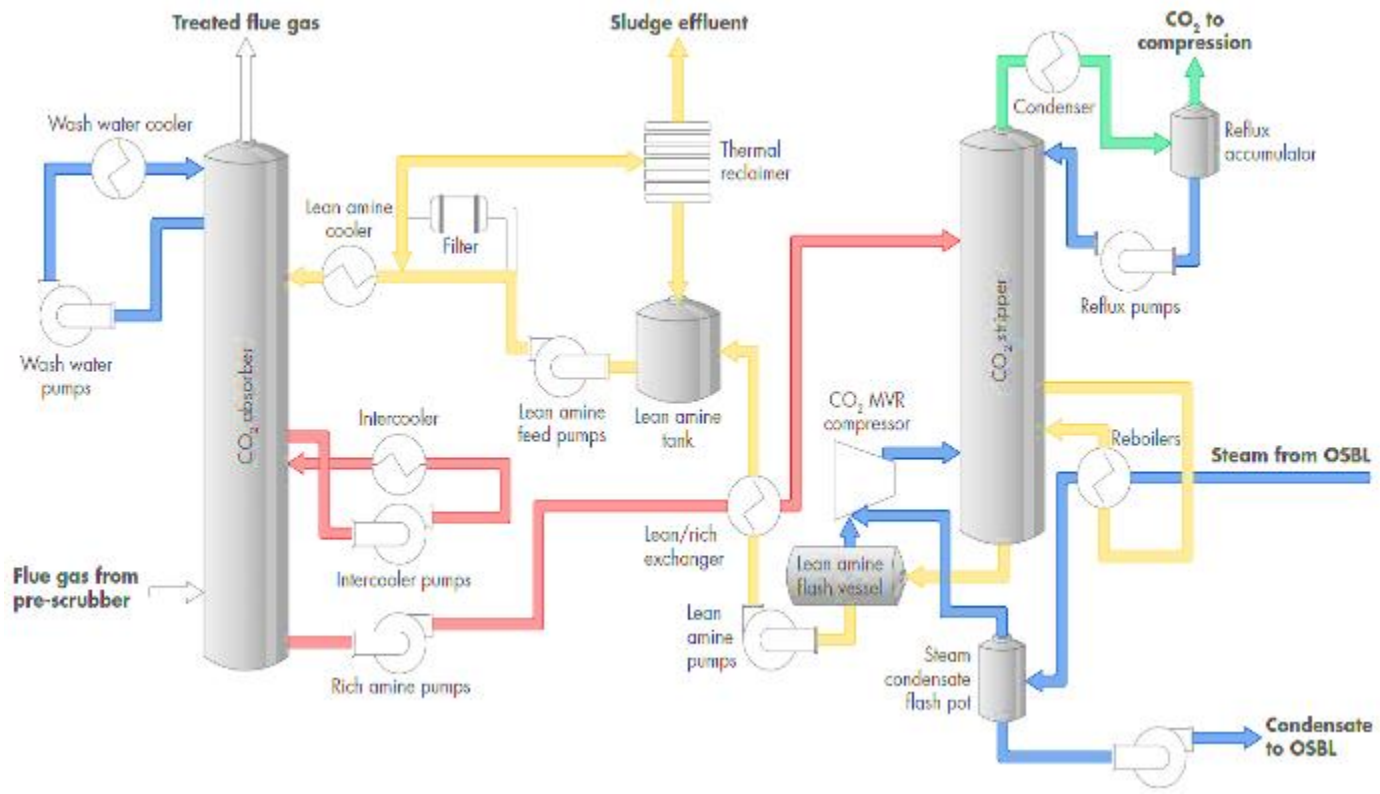
T.EN TECHNIP ENERGIES


Capture.Now™
Canopy™
by T.EN
Powered by
Shell CANSOLV®

Shell CANSOLV® CO_2 Capture System

Proven post-combustion capture technology

CANSOLV® CO_2 Capture Technology



Amine-based Technology

Wide range of post-combustion capture applications at **>95% capture rate**

TRL = 9

High TRL, commercially proven, currently in large-scale operation

Shell - T.EN Alliance Since 2012

Leading collaboration for continuous technology advancement and optimum integration

Capture with Confidence

A full range of solutions powered by Shell CANSOLV® CO2 Capture System

Proven, integrated post-combustion solutions for any emitter

PILOT	C10	C100	C200	C+	MARINE
1.5 ktpa	10 ktpa	100 ktpa	200 ktpa	Bespoke sizing & design	Optimized offshore design
Test anywhere, anytime	Standardized sizes for smaller emitters			Any scale for any facility	Offshore solutions

Capture performance

CO_2 recovery >95%, excellent energy efficiency, low solvent volatility and minimal emissions

Capture capacity

Comprehensive range of sizes available to build the required carbon capture capacity

Capture support[1]

Solving challenges from funding to implementation with our complete solutions

Canopy C200

95%
Capture rate

Modular, transportable by truck

<26 months
Delivery time

[1] Additional services include financial services, operations support and digital monitoring

Canopy™ by T.EN selected references

POWER GENENRATION - NET ZERO TEESSIDE

- Gas fired & CO_2 capture facilities
- 2 MTPA CO_2 Captured
- Teesside, UK

WASTE TO ENERGY - VESTFORBRAENDING GLOSTRUP

- Waste incineration plant
- 450 kta CO_2 Captured
- Glostrup, Denmark

PETROCHEMICAL - SHELL DEER PARK PROJECT

- New Carbon Capture facilities
- 0.84 MTPA CO_2 Captured
- Texas, USA

PILOT TESTING PROGRAMS

- Wt2, Mining, Cement
- 1.5 kta CO_2 Captured
- North America Europe

Capture.Now™

We provide a portfolio of CCUS solutions available now. At scale. Anywhere in the world.

Svante

Partnership with Svante

Next generation carbon capture with leading solid sorbent-based technology

Partnership

- Further develop Svante's solid sorbent CO_2 capture technology for industrial carbon capture projects
- Leverage competencies for effective R&D on integrated technologies and system scaleup
- Provide integrated solutions from concept to project delivery
- Target projects: commercial point source, e.g. FCC, SMR, Steel making, Cement, BECCS
- 2 units of 10 kta in operation and processing flue gas with 3%v to 20%v CO_2

"This partnership clearly reflects the significant role of industrial-scale technologies to accelerate the transition to a low-carbon society.

ARNAUD PIETON,
CEO of Technip Energies

Building a scalable supply chain for active capture materials to address a broad carbon capture and removal solutions offering at gigaton scale.

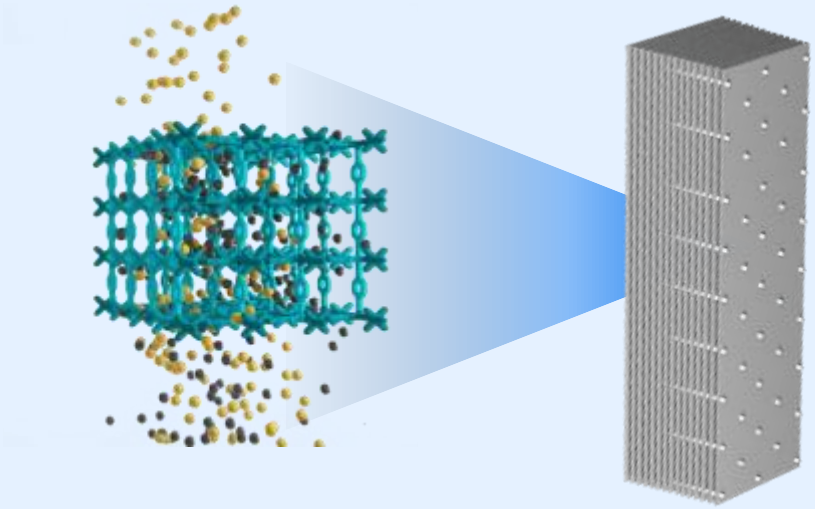
CLAUDE LETOURNEAU,
President and CEO of Svante"

Svante advanced technology

Next generation carbon capture with leading solid sorbent-based technology

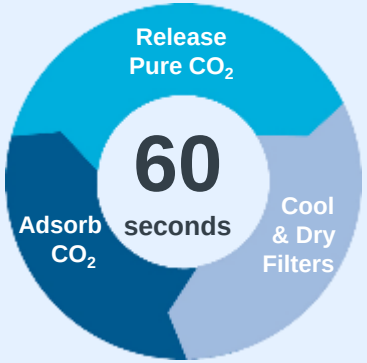
Nanomaterial

- Engineered to have very high capacity for CO_2



Structured Adsorbent

- Formed into thin films and stacked into solid filter
- Repeatable, modular and scalable
- Platform for multiple sorbents

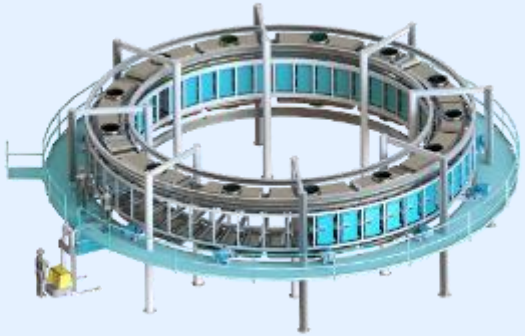


Capture Cycle and Process

- Continuous process – capture CO_2, release it with steam, and prepare filters to capture CO_2 again
- Structured filters with thin-film technology enable rapid cycles of <60 seconds

Design

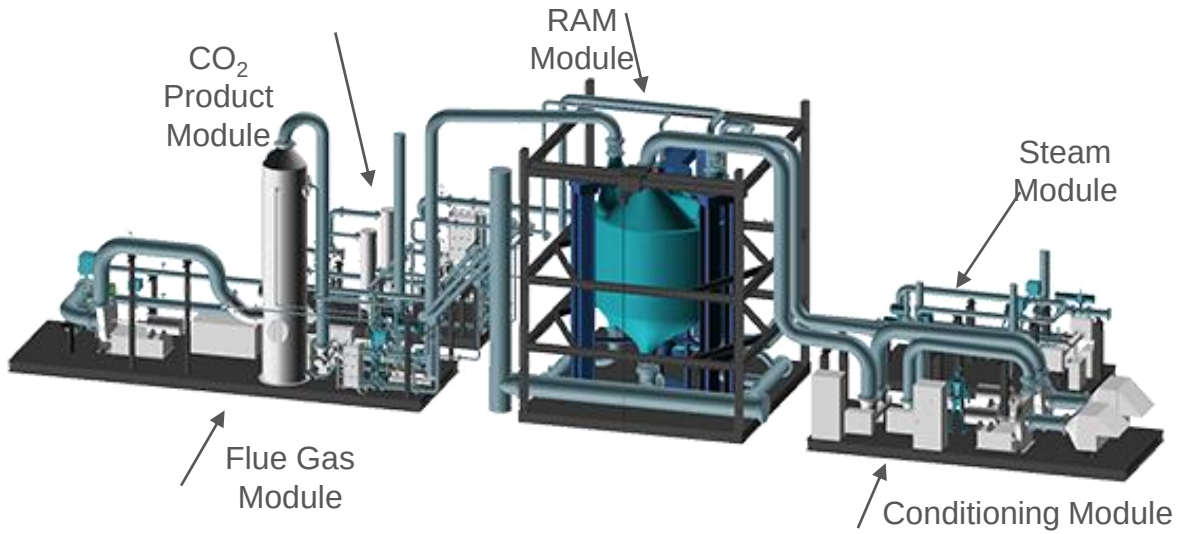
- Enables compact, low-cost contactor equipment
- Modular, repeatable filter design enables mass scalability



Svante Technology implementation Capture.Now™

Chevron SOAK 400 Series Plant

Capacity	**9,125 tpa**
Source	**Industrial Boilers**
Partners	**Chevron, Kiewit (KSI Alliance)**
Location	**San Joaquin, CA, United States**
Phase	**Site Construction**



Operational overview

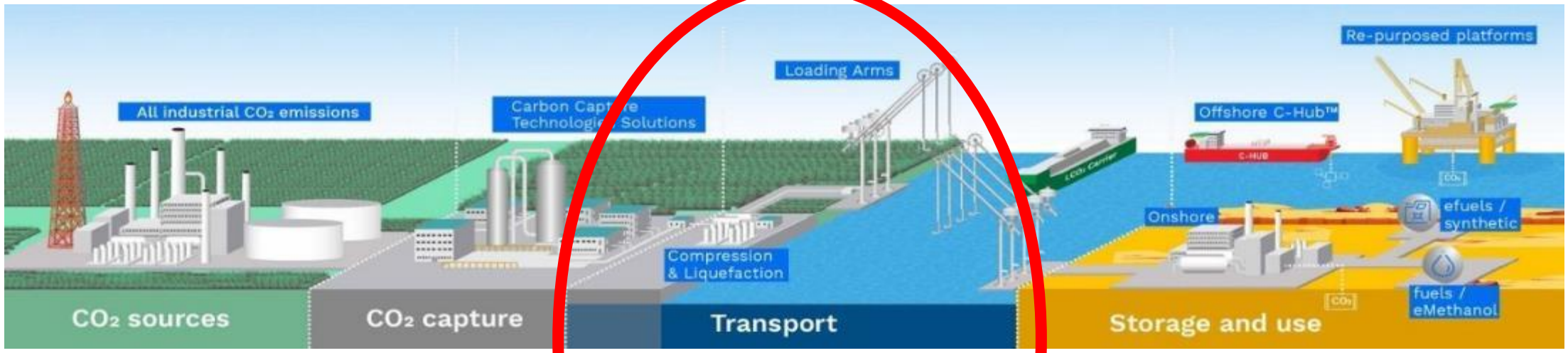
- Second-of-a-kind (SOAK) 400 Series plant being installed by Chevron, with Svante as Technology Package Provider and Kiewit as EPC in target KSI Alliance commercial project delivery model
- Up to 80% funding by U.S. Department of Energy
- Implemented improved SOAK 400 Series RAM design and skid-fabricated modularized design
- Will test Svante's MOF-based SAB filters on natural-gas based flue gas, with ability to vary CO_2 concentration to simulate high and low concentration industrial sources

Testing in progress

Capturing the opportunity of CCUS at scale, now

Membrane Carbon Capture Technology

Capture.Now™, our offering across the CCUS value chain



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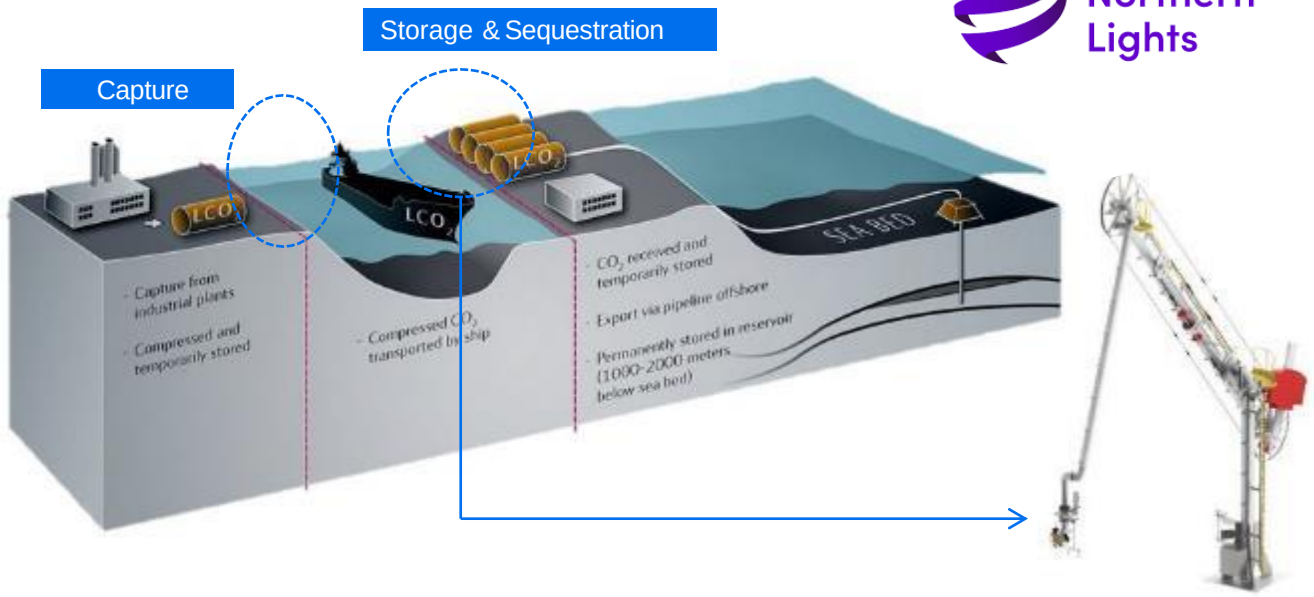
Transportation

A market leader in innovative CO2 loading systems



Liquid and vapor CO_2 transfer capacities

- Handled product: Liquid & vapor CO_2
- Flow rate per arm: 2,000 m^3/h typically, but not limited to typical service conditions:
  - Low pressure: 7 barg at -46°C
  - High pressure: 17,8 barg at -27°C
- Design pressure: Up to 50 barg
- Power type: Manual, hydraulic or electric
- Key components: QCDC, ERS, EasyDrive

Reference Project : Northern Lights (Norway)

- First CO_2 marine loading arms in the world
- 3 x RCMA loading arm 8”x60’
- #300 stainless steel product line
- Swivel joints with additional sealing barriers

› Technip Energies to supply world-first liquefied CO_2 marine loading arms for the Northern Lights project

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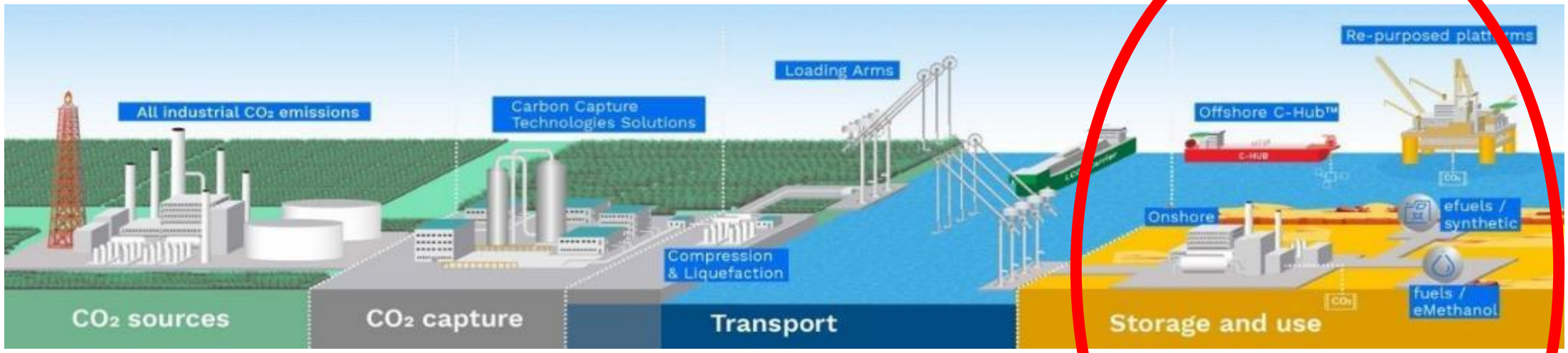

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T.EN TECHNIP ENERGIES

Storage and Injection

Offshore C-Hub™: a flexible solution for offshore carbon management and injection

- Dedicated to offshore reservoirs, **optimal beyond 100km from shore,**
- **Enabler** for offshore carbon sequestration **hubs**
- **Standardized** design and features
- Validated by **several case studies**
- Two **patents** filed
- **'Approval in Principle'** granted by **Bureau Veritas**

Offshore C-Hub™ with vertical CO_2 storage configuration

1 to 10 MTPA
Injection rate

< 1% carbon intensity
Early assessment of emissions/ total CO_2 stored[1]

< 40 months
Time from final investment decision to startup[1]

< 8 months
Redeployment time[1]

< 10€/t of CO_2
CO_2 management cost[1]

Note 1: Assessment Battery limit = Offshore C-Hub + Offshore Offloading North Sea application

Thank You

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Decarbonization Solutions Business Line
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