Revolutionary CO_2 Emission Reduction Material

A Solution for Climate and Business

novoMOF

novoMOF AG, Switzerland, 2024

Investment Deck Disclaimer

novoMOF AG

This presentation (the "Deck") and its contents are confidential and intended solely for the recipients listed herein.

The information contained in this Deck may be legally privileged and confidential. Unauthorized distribution, use, or reproduction of this Deck, in part or in its entirety, is strictly prohibited.

If you have received this Deck in error, please promptly notify the sender or the originating party, and delete or destroy all copies of this Deck and any related materials in your possession or control. You are hereby instructed not to disclose, disseminate, or forward this Deck or its contents to any unauthorized third party without the express written consent of the originating party.

By reviewing this Deck, you agree to be bound by the terms and conditions of this disclaimer. If you do not agree with these terms, please promptly return the Deck to the sender or originating party and do not review or use its contents in any way.

Problem

Energy production and industrial processes produce enormous amounts of CO_2 every year

23.8 gigatons new CO_2 emission from energy production and industrial processes per year - **65% of world's CO_2 emissions!** (2022, IEA*)

This Carbon **needs to be captured!**

State-of-art tech amine scrubbing is **expensive (100-180 CHF / t CO_2)****, complex (big footprint), and environmentally challenging (corrosive solution)

Carbon tax is coming latest 2030 with expected price of up to **220 USD / t CO_2** (IPCC Report by United Nations***)

* https://www.iea.org/reports/co2-emissions-in-2022
** Source: Client emails
*** IPCC Report Chapter 3 (p.300) https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_Chapter03.pdf

novoMOF

Solution

Our ultra-efficient, renewable MOFs for point-source capture

Ready to scale

Efficient CO_2 capture*

Our MOFs capture CO_2 using waste heat (**regeneration at 90 °C**) with demonstrated success at 2.5 t_{CO2}/year scale.

Economical production

Efficient, scalable production recipes **with patent(s) filed and confirmed freedom to operate.**

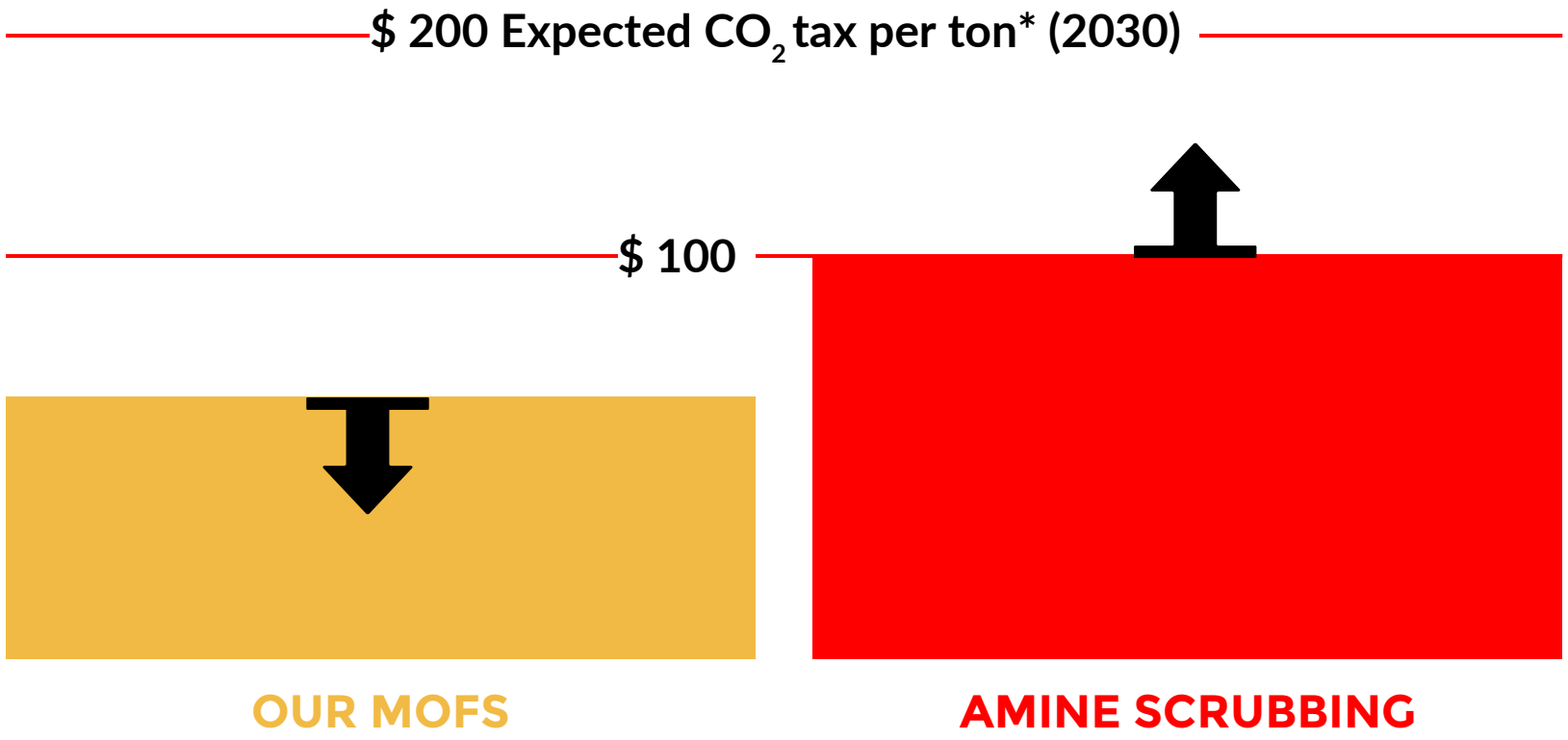
Sustainable materials

Green, biodegradable materials used, including abundant metals and recyclable components.

*Capture = excl. transportation & storage

USP

Pioneering a cost-efficient capture solution, beating the state-of-the-art & CO_2 Tax



* IPCC Report Chapter 3 (p.300) https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_Chapter03.pdf

USP

< 100 $/$t_{CO2}$ capture cost with our MOFs

Revolutionizing CO_2 capture

	novoMOF	Amine scrubbing
Cost per ton CO_2 captured*	**< 100 USD**	**~ 100 USD**
CO_2 binding energy	~54 kJ/mol (-50%!)	~105 kJ/mol
Complexity of plant	low	high
Footprint (size of plant)	container size	building size
Environmental impact	Recyclable components	Toxic, corrosive, hazardous waste treatment
Technology readiness level (TRL)	TRL 5+	TRL 9

Lower OPEX

Lower CAPEX

Green

TRL development now!

*Capture = excl. transportation & storage

novoMOF

IP

We have efficient, scalable recipes for the MOF production and **patents have been filed**

IP of our MOFs for CO_2 capture are around efficient, scalable production recipes (our unique know-how)

1st MOF: Trade secrets on product and production method & FTO confirmed in Europe, USA, Canada, Middle East and China

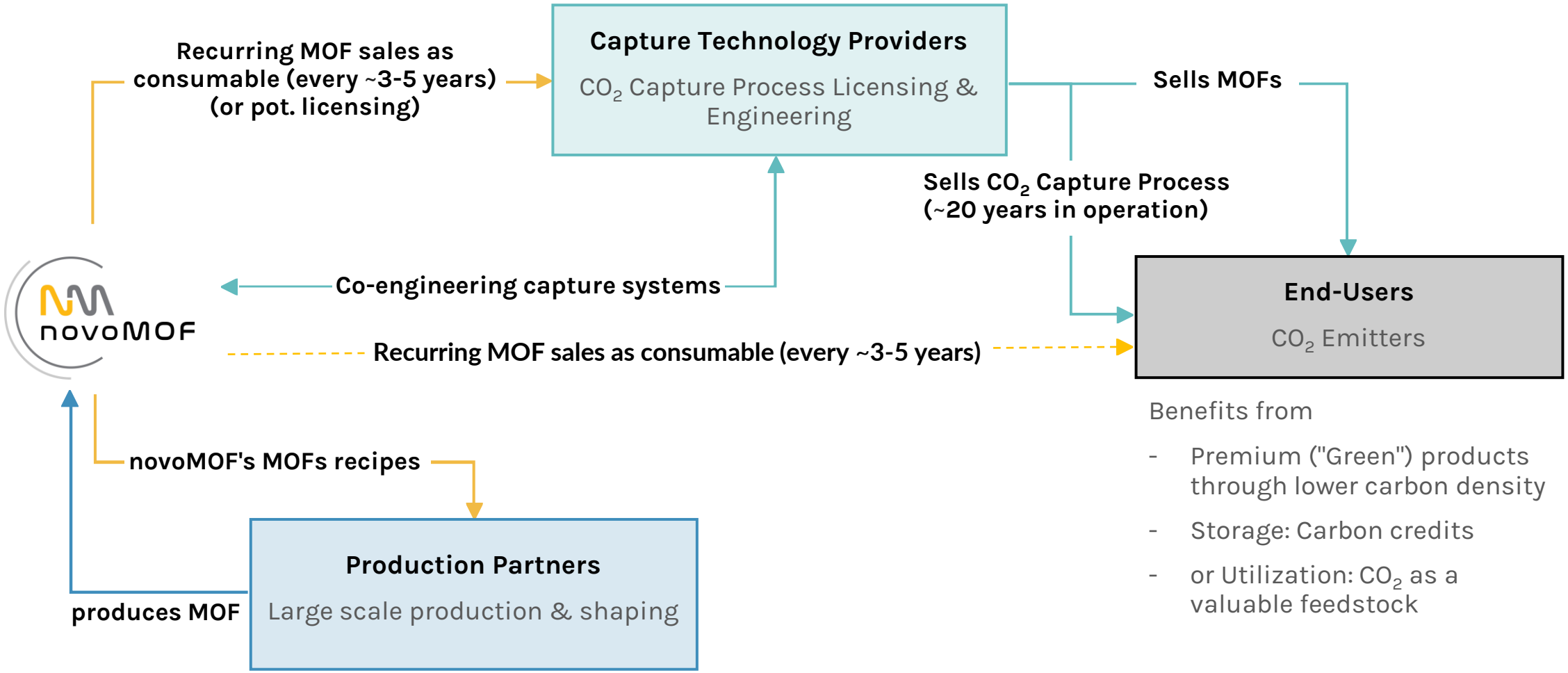
2nd MOF: Patent filed with product, method and application claims with **priority date in Nov. 2023** & FTO confirmed in Europe, USA, Canada, Middle East and China

nth MOF: **Multiple MOFs i**n development, knowhow on further point-source and Direct Air Capture MOFs

novoMOF

Business Model

Recurring revenues: MOFs as consumable

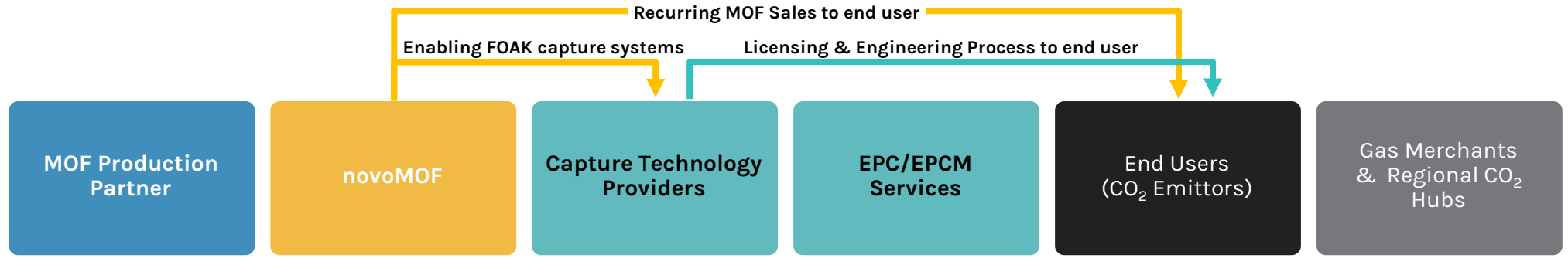


Benefits from

- Premium ("Green") products through lower carbon density
- Storage: Carbon credits
- or Utilization: CO_2 as a valuable feedstock

Carbon Capture Value Chain

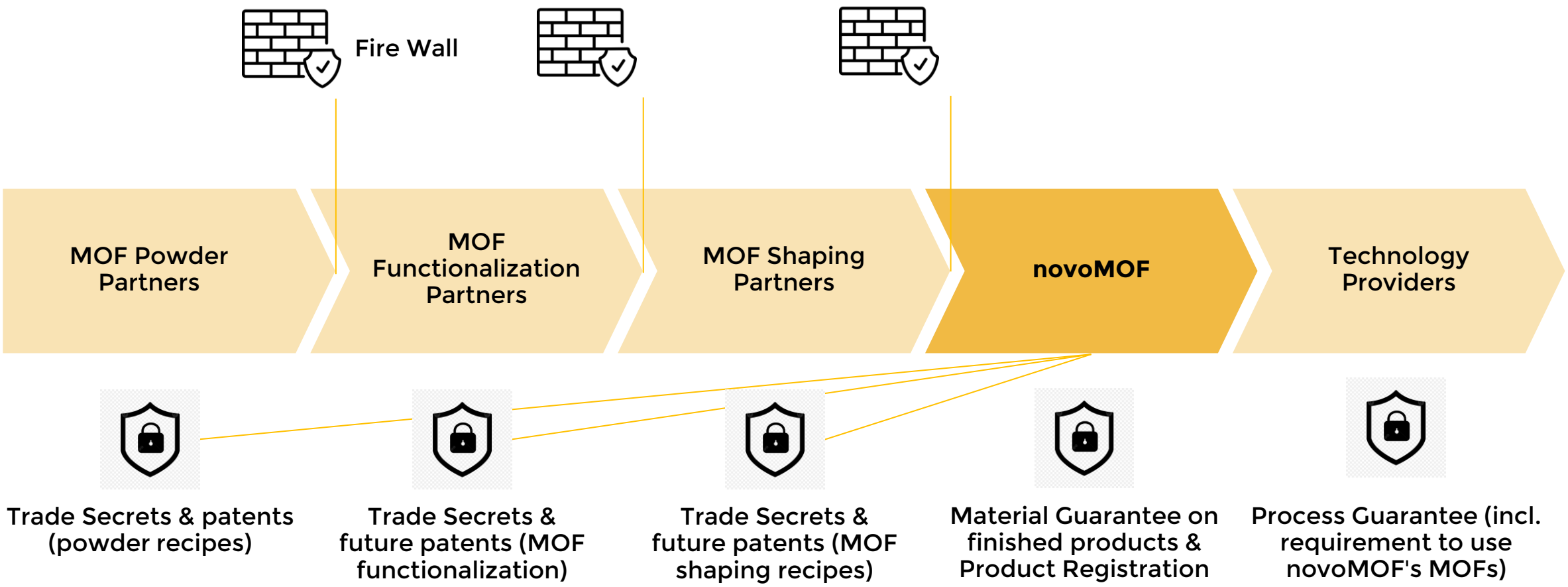
Surplus of CO_2 storage demand & sufficient MOF production capacity
-> Orchestrating Technology Providers & End Users



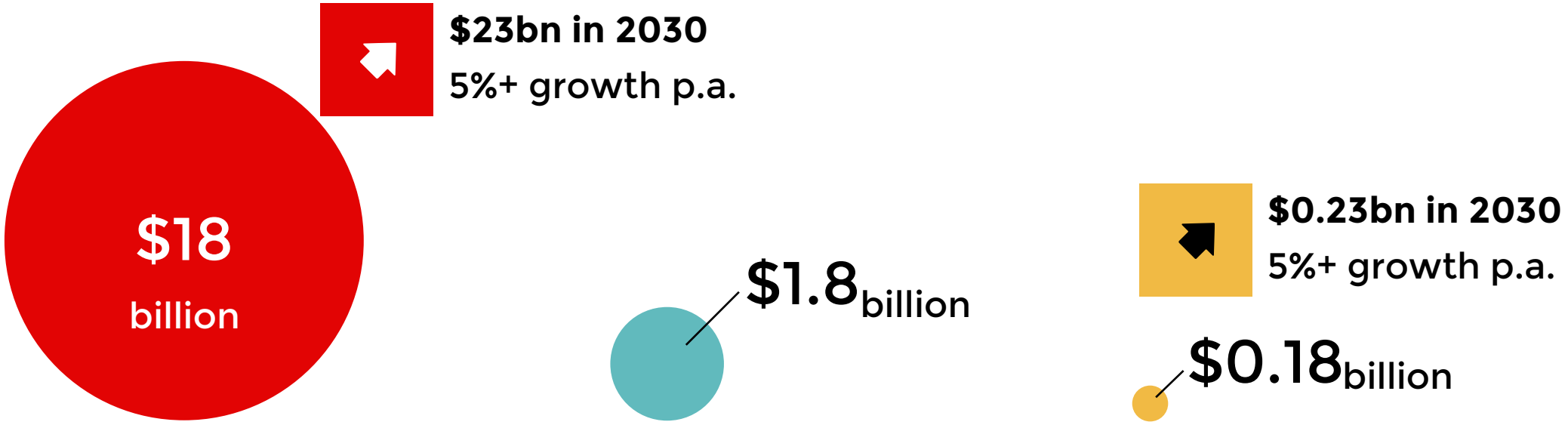
Value Chain	**MOF Production Partner**	**novoMOF**	**Capture Technology Providers**	**EPC/EPCM Services**	End Users (CO_2 Emittors)	Gas Merchants & Regional CO_2 Hubs
Business Model	Contract Manufacturing	MOF Sales & Licensing	CO_2 Capture Process Technology Licensing	CO_2 Capture System Engineering & Construction	Plant Operations (incl. CO_2 Capture)	CO_2 Transport & Storage
Key Insights	Production Capacity of >2000 t of MOF per year and site via single partner	**novoMOF offers already today ideal CO_2 capture MOFs**	**aiming to create USP tech (vs. amine scrubbing) in their industries**		**need <100$ / t CO_2 capture tech for positive business cases**	Storage capacity (615 Mt CO_2) higher than capture capacity (435 Mt CO_2) 2030

https://www.iea.org/energy-system/carbon-capture-utilisation-and-storage

IP Protection through multiple "Moats"



We are disrupting the $18bn global Amine Scrubbing Market growing at 5%+ per year



TAM Global, 2022

Global Amine Scrubbing Market

https://www.skyquestt.com/report/amine-scrubbing-services-market

SAM, 2022

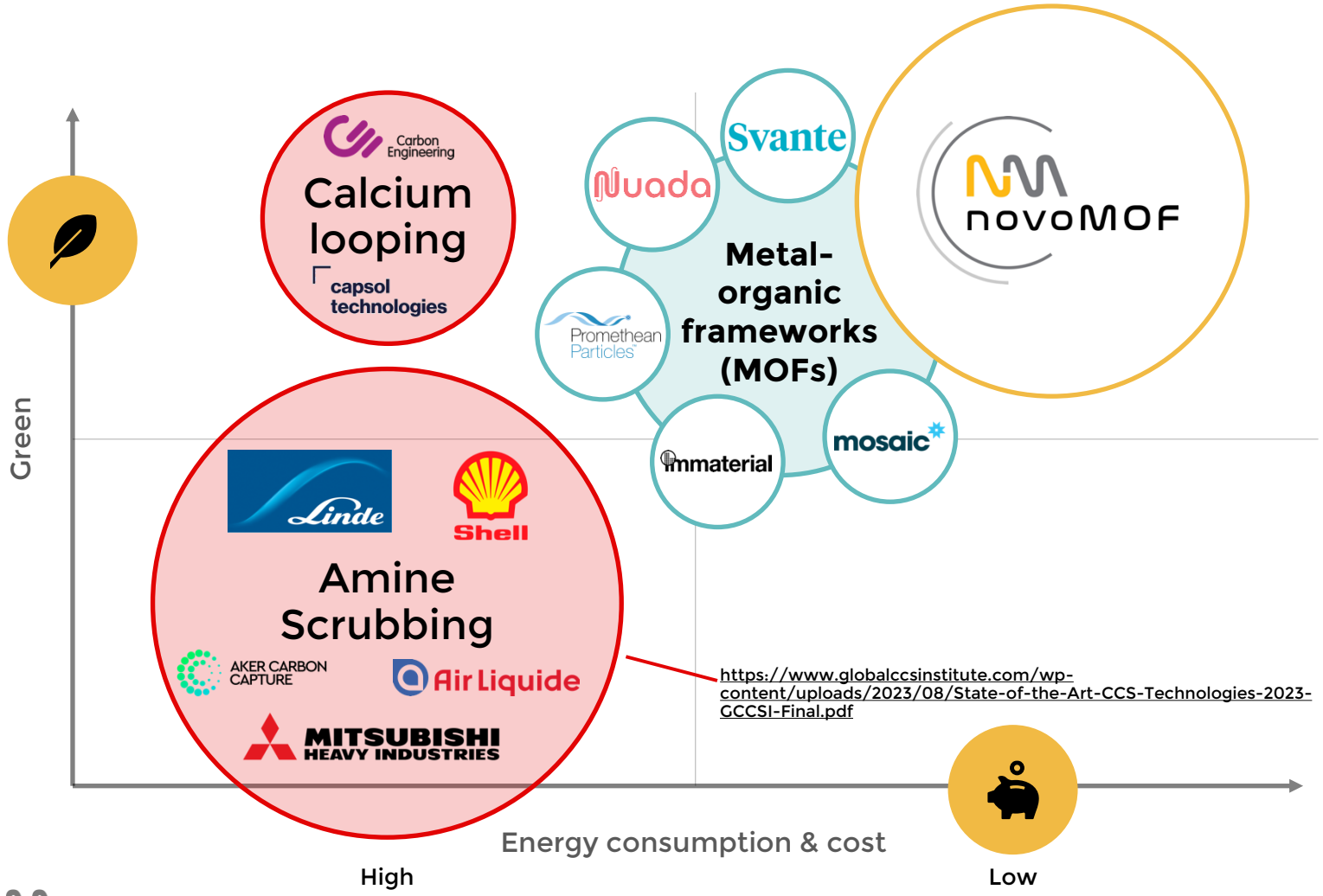
If 10% of Amine scrubbing shifts to more cost-efficient & green technology

SOM, 2022

Revenue potential if novoMOF can serve 10% of that alternative-capture-tech market

Competition

Our MOFs are low cost & green



- Amine scrubbing is environmentally concerning and energy intensive
- MOFs for CO_2 capture are on the rise now!
  1. Svante (CA) raised **$315m in December 2022** (United Airlines Ventures, Samsung Ventures, Hesta AG, GE Vernova...)
  2. Nuada (UK) raised **$10m in July 2023** (BGF, Barclays Ventures...)
  3. Promethean Particles (UK) raised **£8m in August 2024** (Merica Ventures, Aramco Ventures...(
  4. Immaterial (Cambridge, UK) raised **undisclosed amount in October 2023** (SLB, AP Ventures, Cepsa, Chevron Technology Ventures...)
  5. Mosaic (US) **acquired by Baker Hughes in April 2022**

Achievements

Breaking Barriers: **Sub-$100 per Ton CO_2 Capture, achievable** through our MOF Mastery!

1 **2,5 tons CO_2 per year demonstrated with a MOF (with client)**

September 2022

2 **We discovered 2 own MOFs**

January 2023

3 **Proved superiority of our MOFs lab-scale CO_2 demonstrator**

October 2023

4 **FTO confirmed & patent filed for CO_2-MOFs**

November 2023

5 **Acquired Carbon Capture Clients (5+ CO_2 clients)**

May 2024

6 **Technology Provider Partnerships**

1 Partnership Signed (Cement)

3 Partnerships in negotiation

7 **Completed demonstrator:** Our MOF proven on a kg-scale

July 2024

8 **Seed Financing Round**

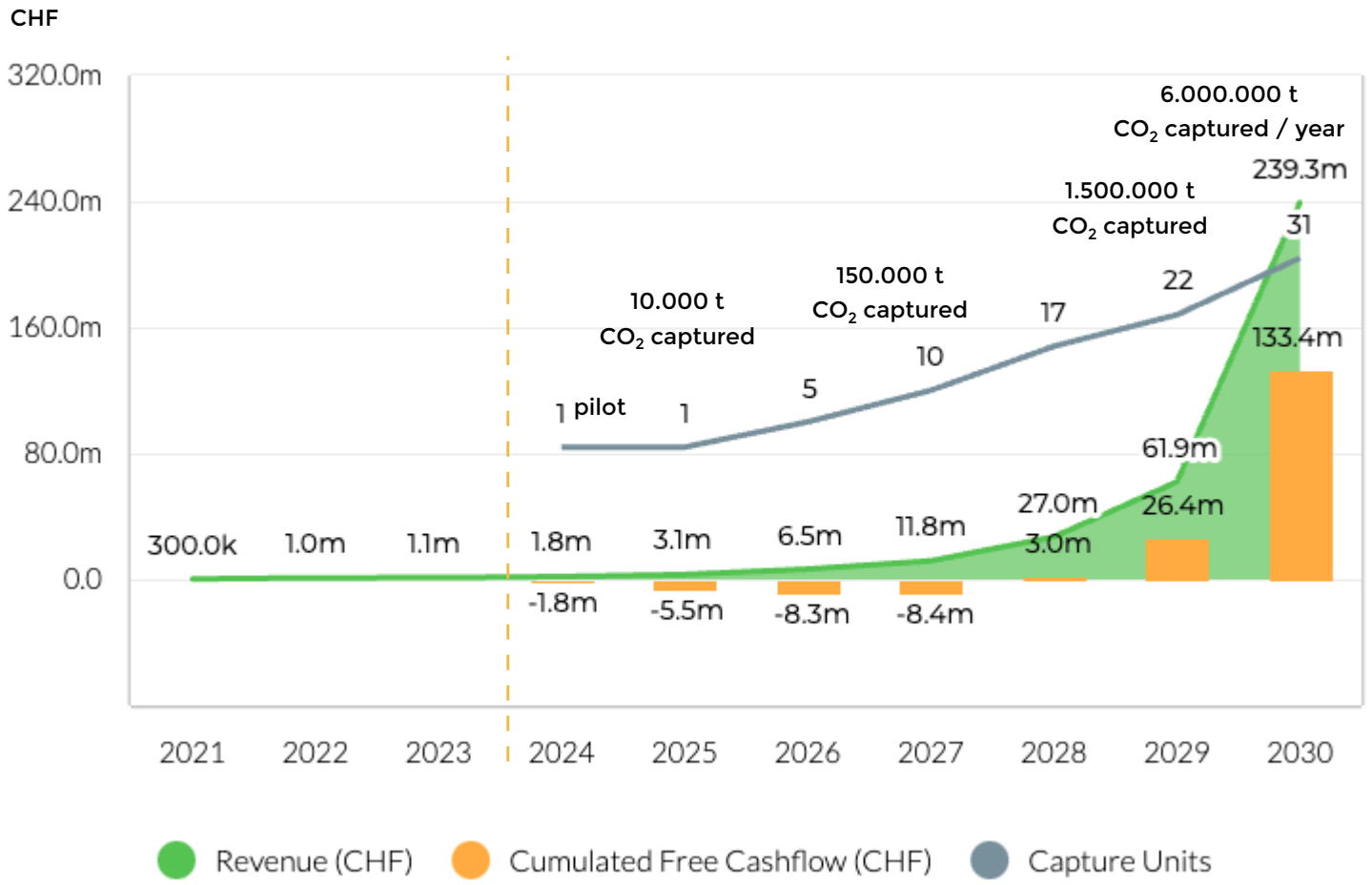
2024

9 **First Commercial Pilot**

2025 with client and industry partner

novoMOF

Financials



- 2023 Strategic pivot to CO_2 market & projects
- 2024-2025 Non-recurring revenue from pilot projects
- 2026+ MOF material sales
- 31 capture plants by 2030 capturing 6 million tons CO_2

REVENUE OPPORTUNITY

Tab into CHF 240m revenue opportunity by capturing 6 million tons of CO_2 with our MOFs

novoMOF

Seed Round

Capitalizing on our unique, scalable MOFs

Accelerating to seize the opportunity

Raising

5

Million CHF

SEED ROUND

2024

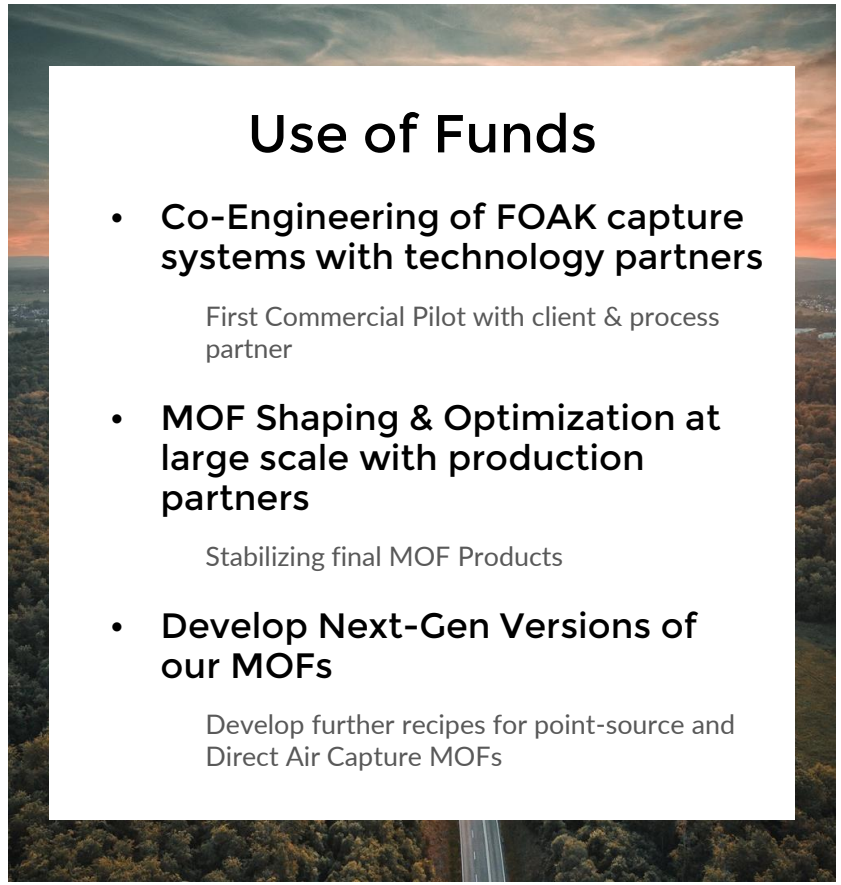
to validate at scale

<$100

capture cost / t of CO_2

ON FIRST COMMERCIAL PILOT

in next 18 months



Use of Funds

- **Co-Engineering of FOAK capture systems with technology partners**
  - First Commercial Pilot with client & process partner
- **MOF Shaping & Optimization at large scale with production partners**
  - Stabilizing final MOF Products
- **Develop Next-Gen Versions of our MOFs**
  - Develop further recipes for point-source and Direct Air Capture MOFs

novoMOF

Roadmap

To date

7+ years of MOF development (Angel Funded)

Market validated

8 CO_2-customers acquired to-date

Patents Filed

We discovered unique MOFs for CO_2 capture, patents filed

Successful **2.5 t CO_2 / year** demonstrator and proof at kg scale

proven with clients and in collaboration with ZHAW

2024 - 2025

Seed Round for pilot scale

Strategic partnership with process builder

to engineer capture process around our MOFs

MOF-Shaping, testing & optimization

of our MOF & demonstrator

Blueprint design complete system

with exhaust gas pre-treatment and CO_2 compression

Commercial Pilot Plant with Client & Strategic Partner

2025 - 2027

Series A or acquisition for industrial scale-up

Scale to first 10'000 t CO_2 / year customers

scale-up pilot to 10'000 t CO_2 / year unit with technology partners

Recurring revenues from 10'000 t CO_2 / year units

200'000 t CO_2 / year units

developed for large emitters

Showcase < 100$ / t CO_2 on first-of-a-kind commercial pilot

Our MOFs are a Platform Technology for other emissions & applications

our current focus

Direct Air Capture (DAC) Atmosphere

~420 ppm CO_2 = 0.04 vol.% CO_2

POST-COMBUSTION CAPTURE (PCC), FLUE GAS

1-20 vol.% CO_2

Bio gas upgrading, Biogas

>20 VOL.% CO_2

Other Applications

Carbon Capture

CO_2

Methane

CH_4

Water

H_2O

Substances of high concern

Volatile organic components (VOCs)

Our MOFs as platform technology

Team

We are engineers and entrepreneurs to the core.

Daniel Steitz

CEO & Founder

MSc ETH in Chemical and Bioengineering

Dr. Charles Toft

CTO

Dr. sc. Chemistry

Dr. Anna Chomiak

Application Engineer

Dr. sc. ETH Process Engineering

Dr. Ewa Banach

Material Specialist

Dr. sc. Chemistry

Timo Steitz

Strategic BD & Co-Founder

MSc Innovation& Entrepreneurship ESADE + MIM CEMS Aalto + B.A. HSG in Business Adm.

Alessandro Brevi

Business Development

MSc in Business Economics & Finance

Paul Davis

Business Development

25+ years experience in enterprise sales

Cristina Lendvai

Marketing Director

MSc in Business Administration

Oliver Maurer

Lab & Production

Specialist Chemistry & Pharma Technologist

Wilhelm Steitz

CFO & Legal

Dipl-Eng. Mechanical Engineering

Board & Advisors

Top notch experts from the chemical, startup industry & research are part of the novoMOF journey

Marco Ziegler

Senior Partner Emeritus McKinsey (chemical, pharmaceutical, and advanced industries)

LinkedIn

Daniel Steitz

MSc ETH in Chemical and Bioengineering

CEO & Founder novoMOF AG

LinkedIn

Balz Roth

Professional business angel, board member, startup advisor for 15 years. Startup Coach at Innosuisse

LinkedIn

Damian Henzi

Business Economics & Management, 10 years at Mars Group, 15 years as CEO of Hochdorf Holding AG, and various board roles.

Wilhelm Steitz

Dipl-Eng.
Mechanical Engineering, 25+ years of experience in different senior management functions at PTC & Computer Vision

LinkedIn

Anil Sethi

Serial Entrepreneur & Author, founded Flisom in 2005, raised >CHF 100m as CEO/CFO before its strategic sale, co-founded several technology startups (Scrona, Instaheat). Startup Coach at Innosuisse

LinkedIn

Board

Advisors

Scientific Advisory board

The world-leading MOF experts & MOF inventor (Prof. Yaghi, UC Berkeley) are in our scientific advisory board

Prof. Yaghi

UC Berkeley

Wikipedia

Prof. Dincă

MIT

Prof. Navarro

Universidad de Granada

Prof. Gassensmith

UT Dallas

Prof. Queen

EPFL

Prof. Taddei

University of Pisa

Prof. van Bokhoven

ETH Zurich

Dr. Ranocchiari

Paul Scherrer Institute (PSI)

Prof. Forgan

University of Glasgow

novoMOF AG

Untere Brühlstrasse 4 | CH-4800 Zofingen | Switzerland

Investor Contact

Daniel Steitz, CEO & Founder

daniel.steitz@novomof.com

+41 77 437 80 47

www.novomof.com

www.linkedin.com/company/novomof