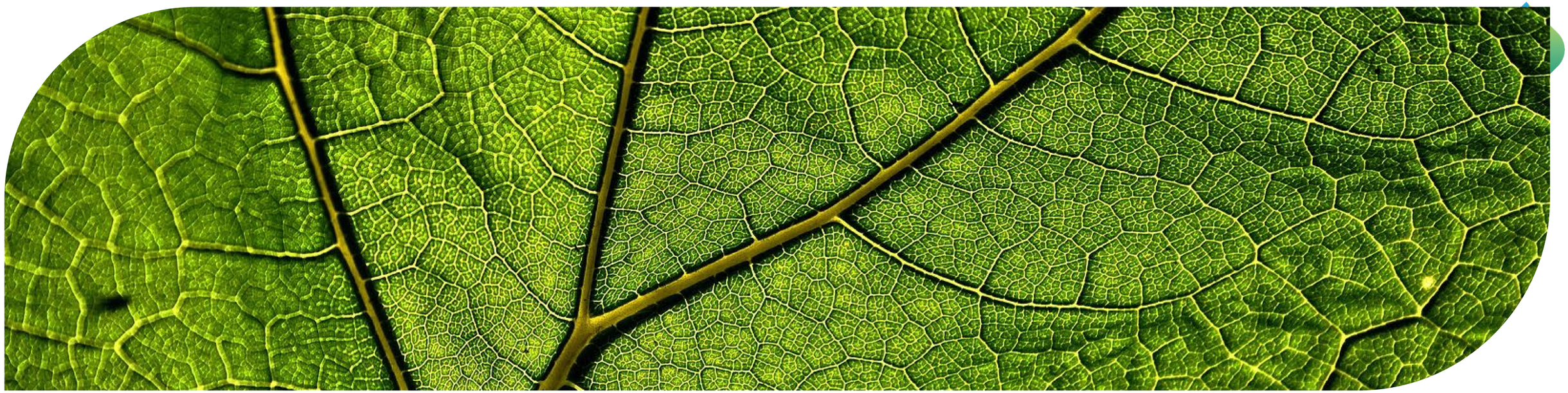
Haffner Energy

Decarbonize · Innovate · Regenerate

Committed to Clean Fuels

Investment Teaser

March 2025



01 Presentation of the Company

Haffner Energy is an experienced cleantech provider

Our value proposition

Decarbonize with competitive clean fuels, backed by 31 years experience

Our vision

Regenerate our planet for future generations

Our mission

Replace fossil fuels with affordable clean fuels

80 international patents on our biomass thermolysis technology

40 plants delivered under EPCM and EPC schemes for a total of 600-MW LHV installed capacity

32 years' experience in biomass-to-energy projects

32-year expertise and feedback in biomass-to-energy

Here are a few references – from the design stage through to handover

- **Project type** EPC/EPCM
- **Power** 38 MW LHV
- **Date** 2020
- **Location** Netherlands

- **Project type** EPC/EPCM
- **Power** 43 MW LHV
- **Date** 2018
- **Location** Italy

Some references

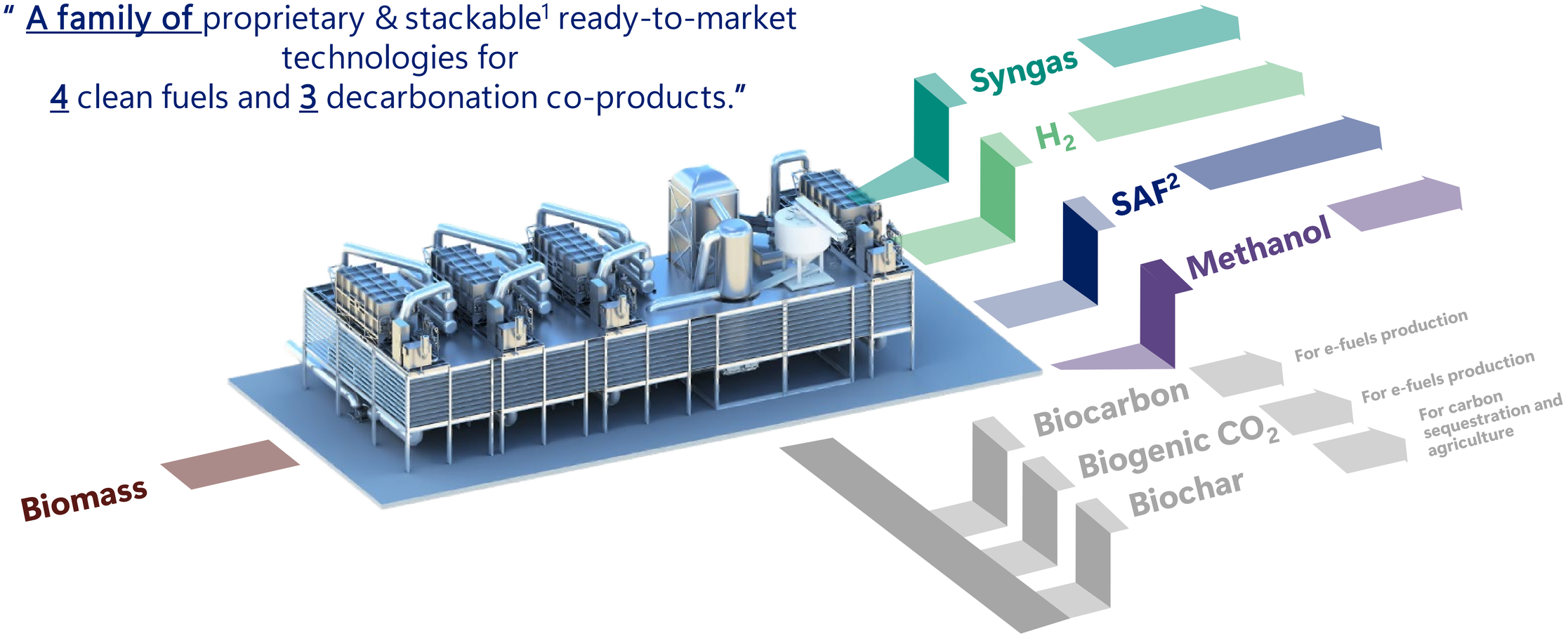
- **Project type** EPCM
- **Power** 25 MW LHV
- **Date** 2013
- **Location** France

- **Project type** EPCM
- **Power** 10 MW LHV
- **Date** 2010
- **Location** France

Note: EPCM stands for Engineering, Procurement and Construction Management and EPC stands for Engineering, Procurement and Construction & LVH stands for Lower Heating Value in biofuels production

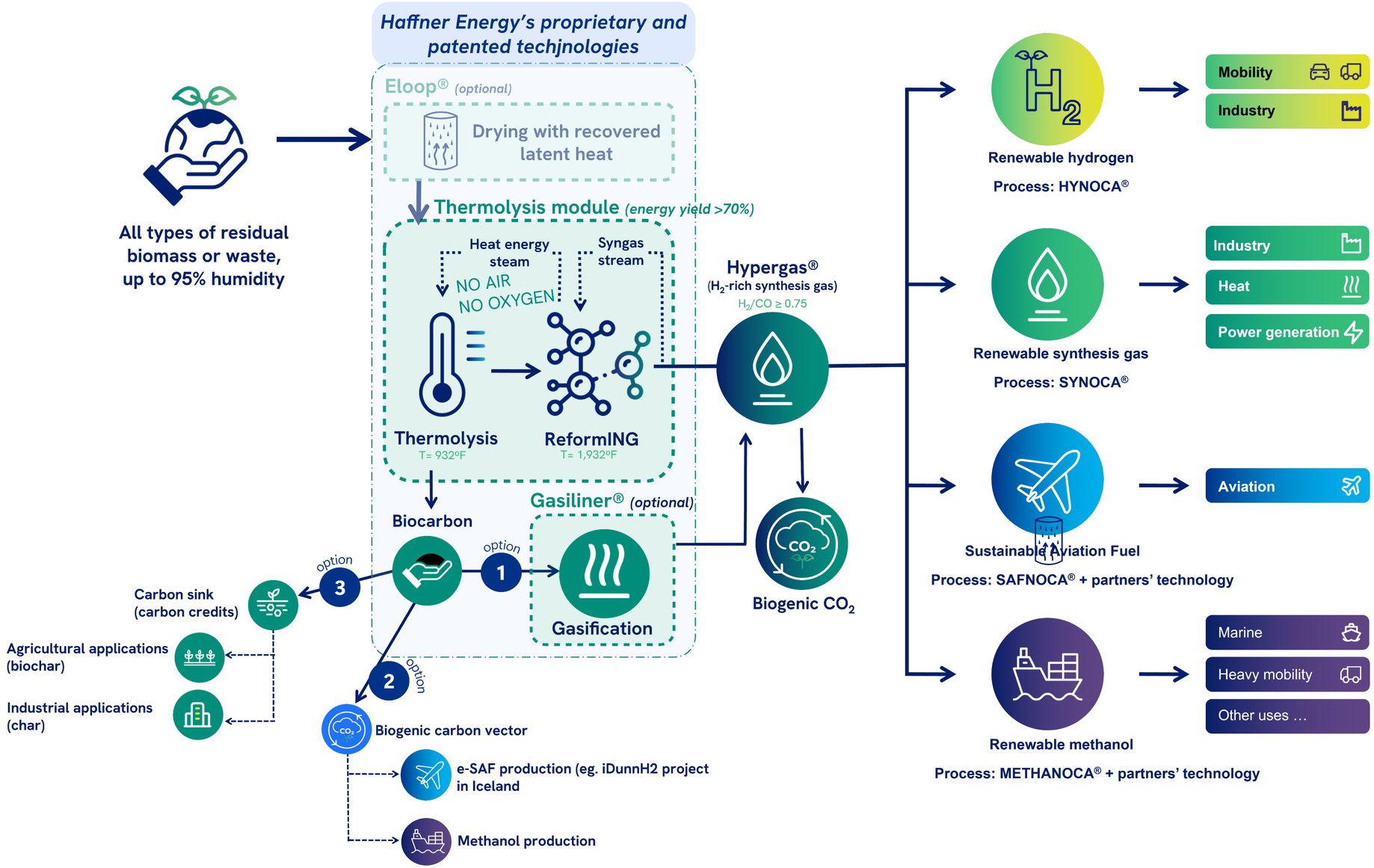
Our tech produces clean fuels from any biomass or waste.

" A family of proprietary & stackable[1] ready-to-market technologies for
4 clean fuels and 3 decarbonation co-products."



(1) Arranged horizontally (2) SAF stands for Sustainable Aviation Fuel

1 family of technologies, 4 solutions, 4 markets



Our offers are modular to ease scaling up and standardisation

Unique biomass agnostic technology

An abundant resource

1 billion tons of sustainable biomass per year are available in the sole U.S.[1] just for SAF, equivalent to 61% of the current worldwide aviation fuel consumption

A reduced cost

Unlike traditional biomass, residual biomass incurs no production costs and fierce competition, leading to a low cost ($20/MWh)

Turning waste into a resource

Residual biomass are left untreated and destroyed, leading to a net loss of potential energy

A great security in feedstock supply

Being able to use most types of biomass means abundant feedstock in all seasons, in most places

Some examples of biomass


Cereal straw


MSW


Vine residues


Algae


Green waste


Manure


Energy crops


Flax

(1) U.S. Department of Energy Bioenergy Technologies Office (BETO) 2023 Report

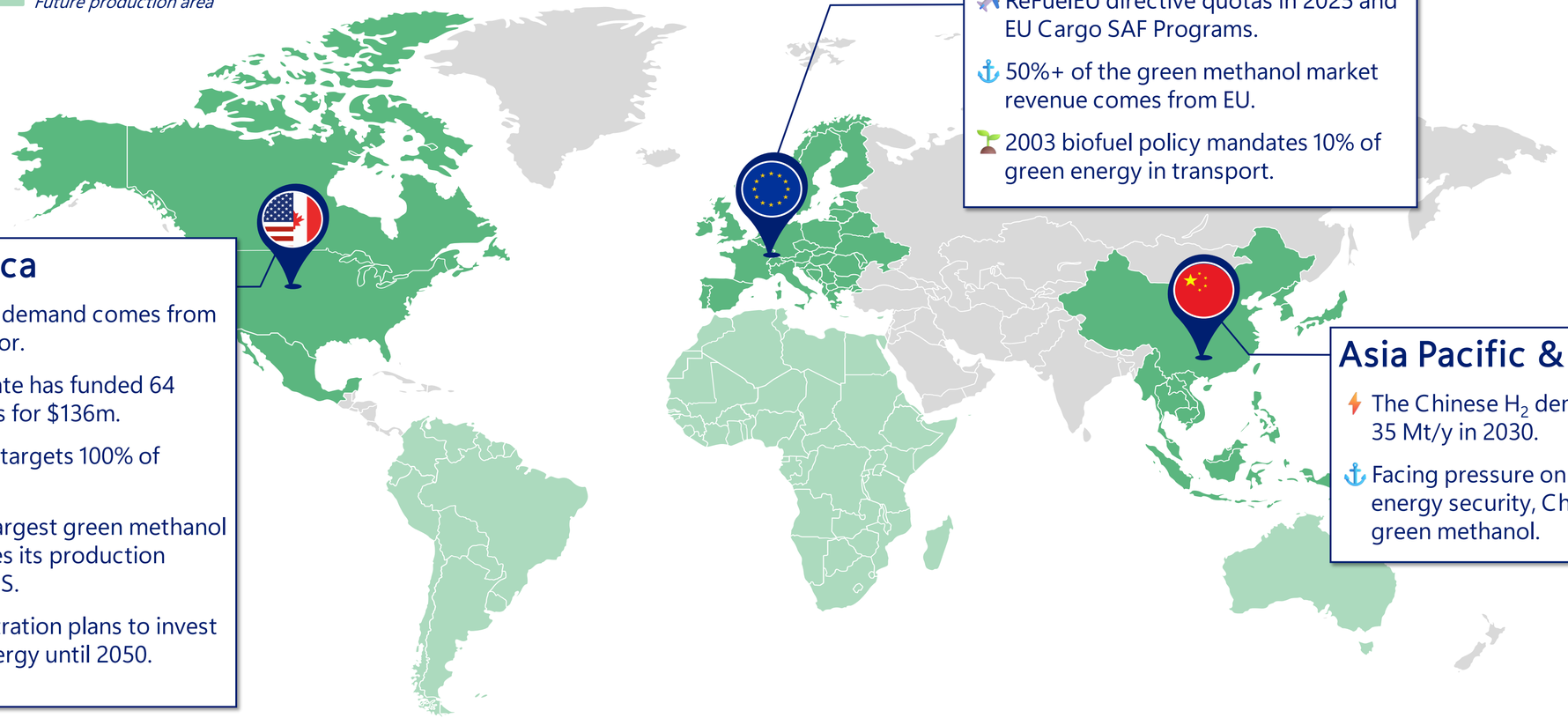
02 Market and perspectives

Unprecedent global momentum for green energy

Green energy market drivers in strategic areas

for H_2 / for Methanol / for SAF / for Green Energy

Consumption area *Future production area*



North America

- 81% of the US H_2 demand comes from the industry sector.
- The California state has funded 64 public H_2 stations for $136m.
- By 2050, the U.S. targets 100% of aviation fuel SAF.
- OCI Global, the largest green methanol producer, doubles its production capacity in the U.S.
- The U.S. administration plans to invest $2tn in green energy until 2050.

Europe

- Mobility and gas injection will account for 25% of H_2 demand.
- ReFuelEU directive quotas in 2025 and EU Cargo SAF Programs.
- 50%+ of the green methanol market revenue comes from EU.
- 2003 biofuel policy mandates 10% of green energy in transport.

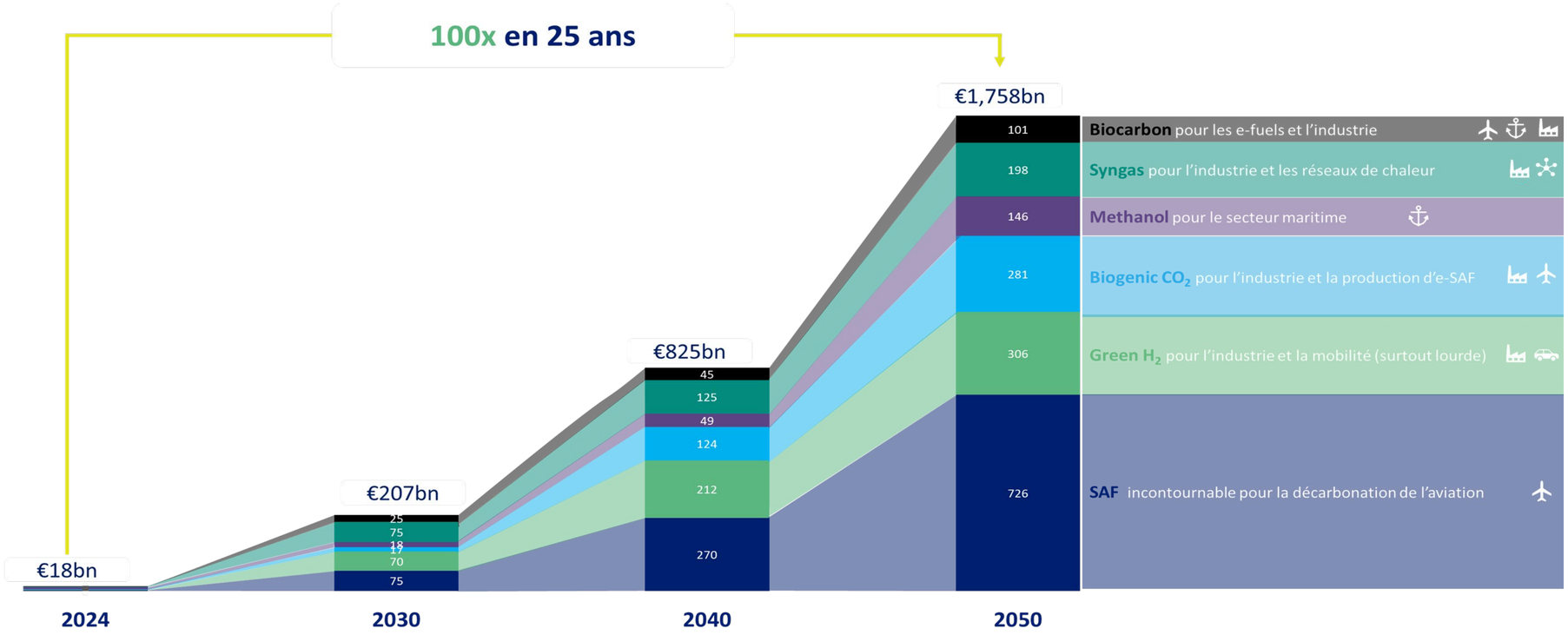
Asia Pacific & China

- The Chinese H_2 demand will boom to 35 Mt/y in 2030.
- Facing pressure on air pollution and energy security, China is pushing on green methanol.

Sources: EY Report commissioned by Haffner Energy , Strategy& SAF 2022 Report, McKinsey Hydrogen 2023 Report

We address 6 multi-billion € markets

91x from today to 2050

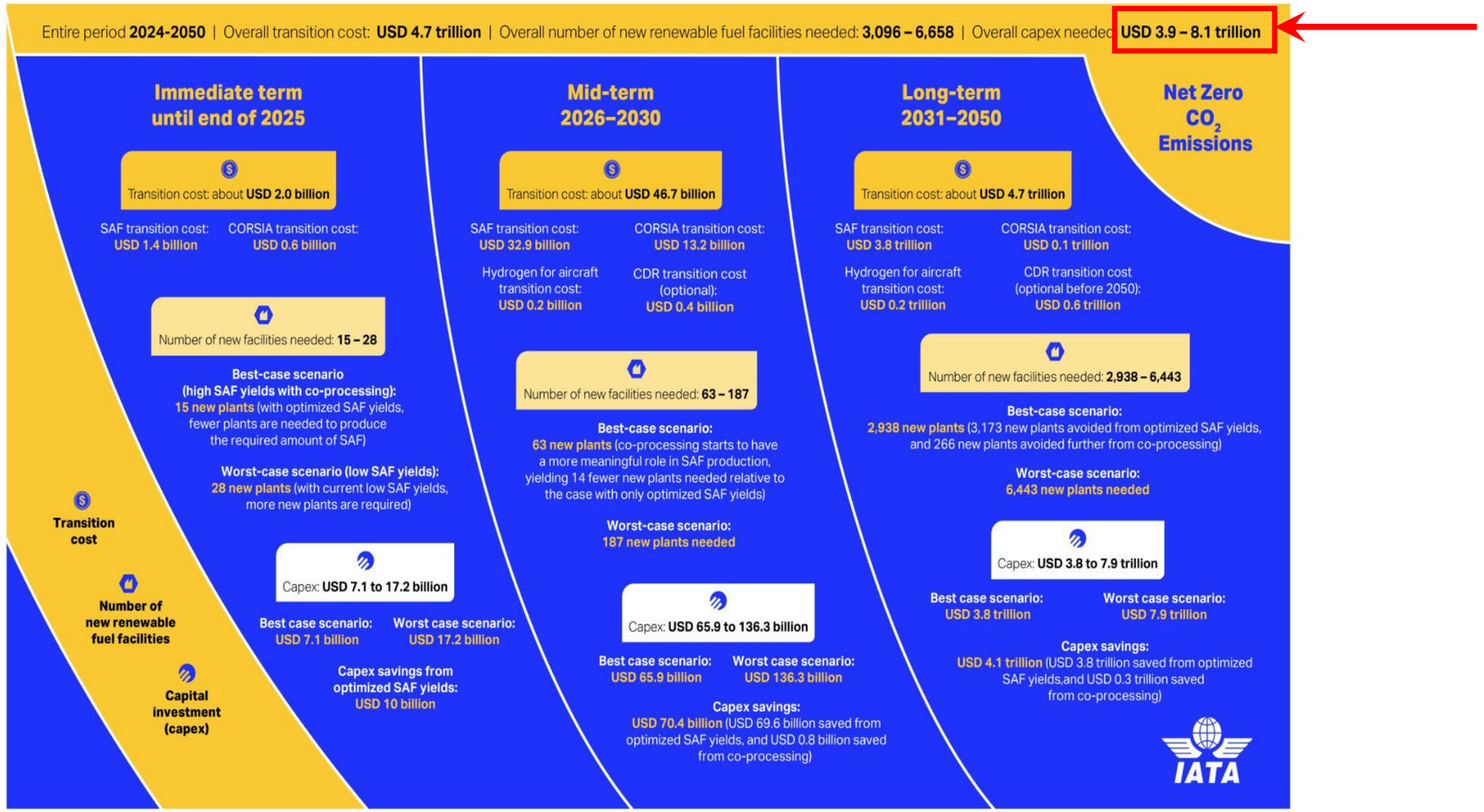


Clean energy markets are taking off now, boosted by major new regulations & incentives.

Sources: EY Report commissioned by Haffner Energy , Strategy& SAF 2022 Report, McKinsey Hydrogen 2023 Report

An adressable market in trillion euros, where biomass is unavoidable

- SAF will represent half of the adressable. IATA expects Capex investments between 3,9 and 8,1 trillion $ by 2050 in production facilities



Source: International Air Transport Association

Haffner Energy's development journey: 5-phase scale-up

1993 — Expertise building and key references acquisition

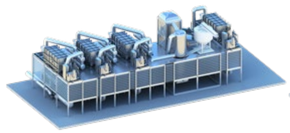
2010 — R&D, POC and Demonstration phase

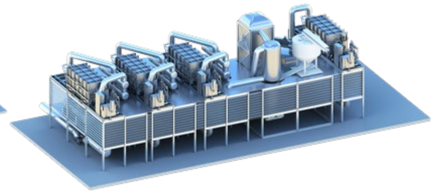
2023 — Industry phase

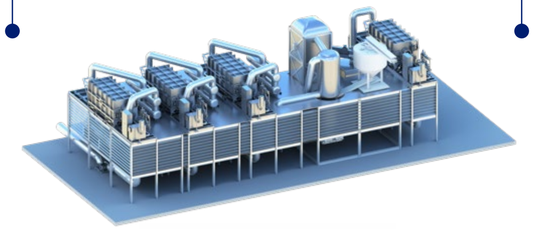
Today — Industry phase

2025/2026 — Large-scale deployment phase

Long term — Large-scale deployment phase







EPC[1] engineering

Project management, due diligence, 40 projects from 1993 to 2020, 600-MW total installed base

1MW module

Four generations of prototypes with proof of concept
Industrial demonstration unit in Strasbourg, France – commissioning in 2021

1.5MW module

Operating unit in Marolles, France
Commercial, training, biomass testing

Live in May 2024

1.5-20MW module

Syngas

H_2

Biogenic carbon

20MW stackable[2] module

Syngas

H_2

Methanol

Biogenic carbon

20-50MW stackable[2] module

Syngas

H_2

SAF

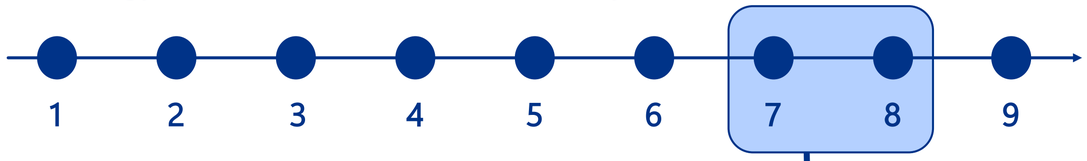
Methanol

Biogenic carbon

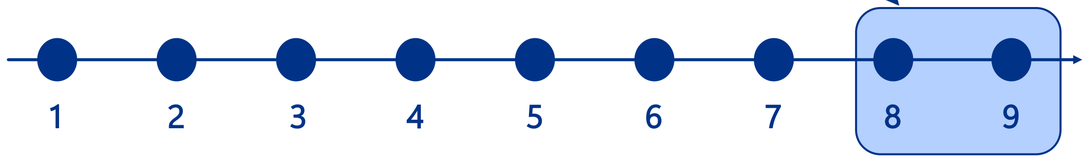
(1) EPCM stands for Engineering, Procurement and Construction Management and EPC stands for Engineering, Procurement and Construction (2) Horizontally arranged

Haffner Energy is technologically ready

Technology Readiness Level (TRL), assess by DNV in December 2021



Situation in March 2025



DNV confirmed beginning 2022 Haffner Energy's technology readiness and short time to market

TRL 1	Basic principles observed
TRL 2	Technology concept formulated
TRL 3	Experimental proof of concept
TRL 4	Technology validated in lab
TRL 5	Technology validated in industrially relevant environment
TRL 6	Technology demonstrated in industrially relevant environment
TRL 7	System prototype demonstration in operational environment
TRL 8	System complete and qualified
TRL 9	Actual system proven in operational environment

Today, the technology has a TRL between 8 and 9

Source: DNV Technical Due Diligence Executive Summary

Marolles, a syngas / H_2 testing & production plant

Production, testing, and training facility

Project purpose

Production and testing syngas/H_2 center (with biochar production)

Showcase compatibility of different biomass and organic waste types with Haffner Energy process

Training center for Haffner Energy customers / employees

Commercial showroom for customers and business partners

See press releases here

Key project information

Project owner

Haffner Energy
Decarbonize · Innovate · Regenerate

Location

Marolles in the Champagne area, France

Production in the context of the site's operations

120 tons H_2 per annum (15kg/h)
300 tons biochar per annum that can be gasified
0.64MWh/h syngas compatible with SAF

Timeline

Jan. 2024 : construction starts
June 2024 : syngas production begins
Feb. 2025 : H_2 production begins

Paris - Vatry SAF

by Haffner Energy

First-of-a-kind bio-SAF project in Europe

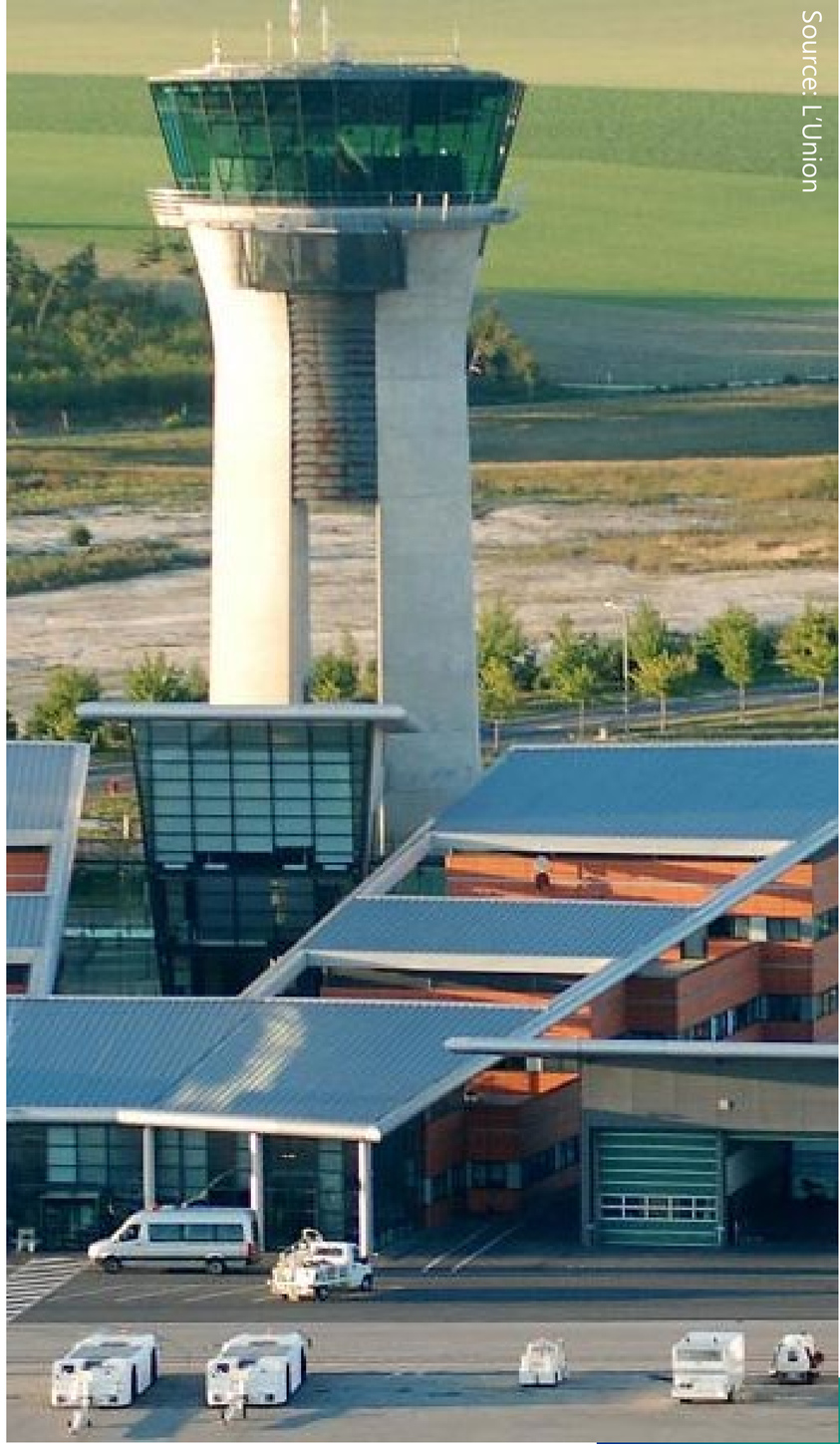
Key project info

Project developer	SAFzero SAF projects & production technology Haffner Energy Decarbonize · Innovate · Regenerate
Tech partners & pathway	Haffner Energy Decarbonize · Innovate · Regenerate ASTM-approved ATJ pathway by LanzaTech LANZAJET
Location	**Paris-Vatry airport** in Champagne, France
Volume	**60,000** MT per annum SAF, expansion potential to 90,000 MT
Timeline	**2029** SAF production launch target

See press releases here and here

Project differentiators

- **400 kt CO_2eq avoided per year,** with 80% emissions reduction v. conventional jet fuel (1)
- **Optional Biogenic CO_2 production**, creating e-SAF co-location potential
- **Residual biomass as feedstock,** with abundant supply
- **Compliant with latest EU mandates** on SAF production
- **Haffner Energy's 32-year experience** in biomass-to-energy production



Source: L'Union

(1) Equivalent to 40,000 European flights (assuming average distance of 1,000 km)

Corbat Group's 1st green hydrogen project in Switzerland

Key project info

Project developer	H_{2}^{bois}
Goal	**Green hydrogen** and **electricity** for industrial and mobility applications
Location	**Glovelier, Jura County, Switzerland**
Volume	**720 kg H_2 per day** (1)
Timeline	**July 2026** commissioning target

Project differentiators

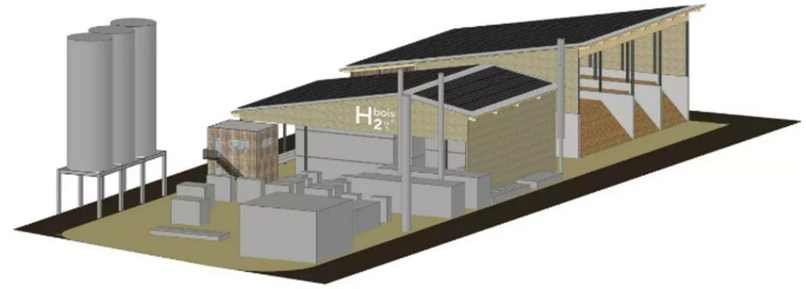
Co-production of biochar, a carbon sink with agricultural and industrial applications, responsible for the negative carbon footprint of produced hydrogen

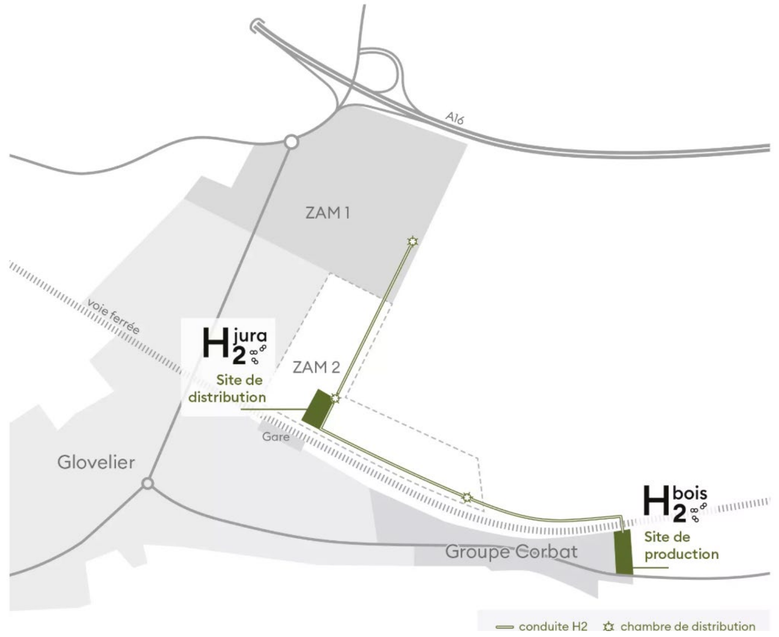
Residual biomass as feedstock, procured from local forestry and wood industries

32

Haffner Energy's 32-year experience in biomass-to-energy production

site de production





(1) Equivalent to 72,000 km travelled by a Toyota Mirai or 9,000 km travelled by a 44-tonne truck

A pipeline and guidances reflecting the Company's perspectives

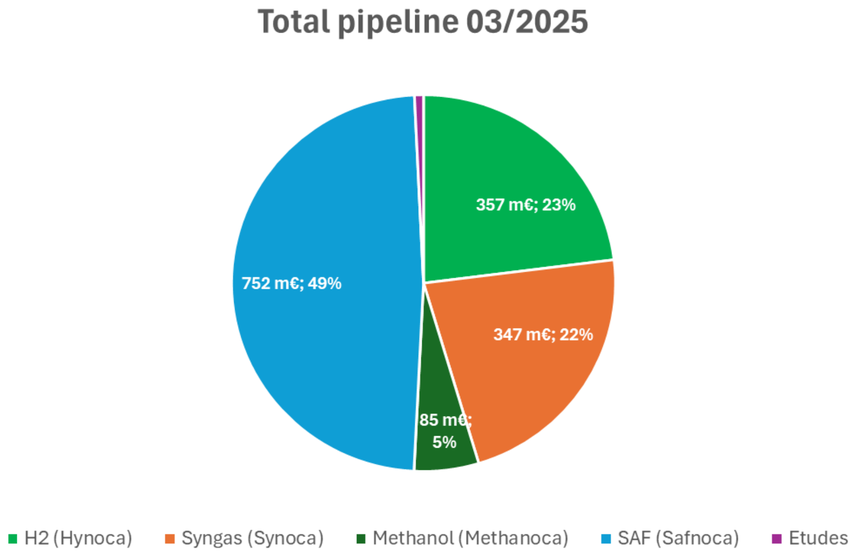
Guidances

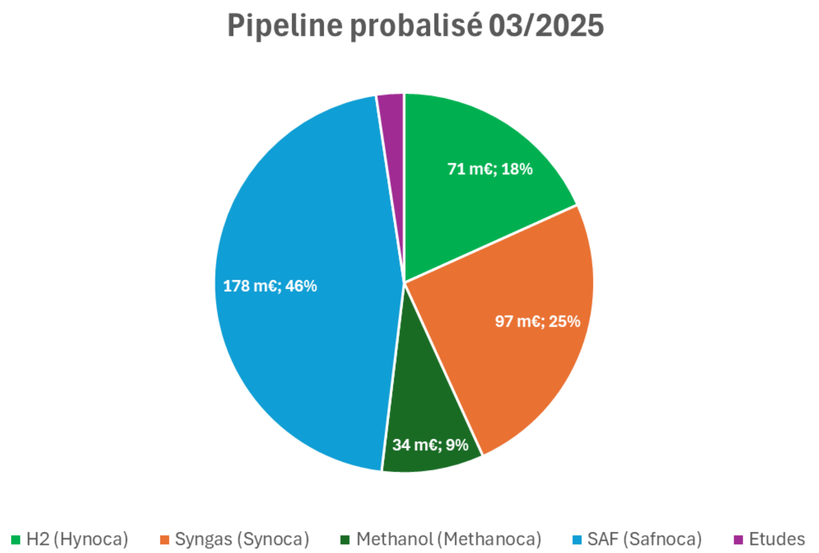
EBITDA 31/03/2026
Breakeven

PIPELINE
1,55 Mds €

Weighted PIPELINE

388 m€





03 Accounts & Capital Structure

P&L

Half-year results at 30 September 2024

En k€	Notes	30/09/2024	30/09/2023
Chiffre d'affaires	6.2	207	(343)
Autres produits	6.3	184	18
Achats consommés		(1 332)	0
Variation des stocks d'en-cours et produits finis		2 017	417
Achats non-stockés et fournitures	6.4	(499)	(345)
Autres achats et charges externes	6.4	(2 012)	(1 869)
Charges du personnel	6.5.2	(2 556)	(2 996)
Autres produits et charges	6.4	(681)	(359)
EBITDA*	**6.6**	**(4 672)**	**(5 477)**
Amortissements des immobilisations corporelles, incorporelles et droits d'utilisation	8	(626)	(1 956)
Dotations nettes aux provisions	6.4	(120)	3 902
Résultat opérationnel		**(5 418)**	**(3 531)**
Produits financiers	7	61	236
Charges financières	7	(45)	(40)
Résultat financier net		**16**	**196**
Quote-part dans le résultat de l'entreprise mise en équivalence (nette d'impôt)		-	-
Résultat avant impôt		**(5 401)**	**(3 335)**
Impôt sur le résultat	8.1	(14)	2
Résultat net de l'exercice		**(5 416)**	**(3 333)**
Résultat de la période attribuable aux :			
Propriétaires de la société		(5 416)	(3 333)
Participations ne donnant pas le contrôle		-	-
Résultat par action			
Résultat de base par action (en euros)	16.2	(0,12)	(0,08)
Résultat dilué par action (en euros)	16.2	(0,12)	(0,08)

Annual results at 31 March 2024

En k€	31/03/2024	31/03/2023
Chiffre d'affaires	(157)	303
Autres produits	69	26
Variation des stocks d'en-cours et produits finis	2 094	-
Achats consommés	(3 030)	-
Achats non-stockés et fournitures	(894)	(673)
Autres achats et charges externes	(4 274)	(3 188)
Charges du personnel	(6 230)	(5 185)
Amortissements des immobilisations corporelles, incorporelles et droits d'utilisation	(2 587)	(520)
Autres produits et charges	4 747	(7 247)
Résultat opérationnel	**(10 263)**	**(16 484)**
Produits financiers	425	81
Charges financières	(92)	(71)
Résultat financier net	**333**	**10**
Quote-part dans le résultat de l'entreprise mise en équivalence (nette d'impôt)	-	-
Résultat avant impôt	**(9 929)**	**(16 474)**
Impôt sur le résultat	(6)	13
Résultat net de l'exercice	**(9 935)**	**(16 461)**
Résultat de la période attribuable aux :		
Propriétaires de la société	(9 935)	(16 461)
Participations ne donnant pas le contrôle	-	-
Résultat par action		
Résultat de base par action (en euros)	(0.22)	(0.37)
Résultat dilué par action (en euros)	(0.22)	(0.37)

Balance sheet

Half-year results at 30 September 2024

En k€	Notes	30/09/2024	31/03/2024
Immobilisations incorporelles	10.1	7 937	7 843
Ecarts d'acquisition	9	497	497
Immobilisations corporelles	10.2	1 487	1 498
Droits d'utilisation	11	579	821
Actifs financiers	12	230	244
Actifs d'impôt différé		24	38
Actifs non courants		**10 753**	**10 941**
Stocks et en-cours	13	13 395	10 145
Créance clients	14	1 852	1 823
Actifs sur contrat client courants	14	186	177
Autres actifs courants	14	8 171	11 590
Trésorerie et équivalents de trésorerie	15	3 637	11 042
Actifs courants		**27 241**	**34 777**
Total des actifs		**37 994**	**45 718**

		30/09/2024	31/03/2024
Capital social	16.1	4 469	4 469
Primes d'émission		58 682	58 682
Réserves		(36 571)	(26 456)
Résultat global		(5 416)	(9 928)
Capitaux propres attribuables aux propriétaires de la Société		**21 165**	**26 768**
Emprunts et dettes financières non courants	21.2.3	2 090	2 050
Dettes de loyers non courantes	21.2.3	386	496
Passif au titre des régimes à prestations définies	6.5.3	67	86
Provisions non courantes	17	-	-
Autres passifs non courants	18	3 464	3 469
Passifs non courants		**6 007**	**6 101**
Emprunts et dettes financières courants	21.2.3	1 084	1 929
Dettes de loyers courantes	21.2.3	189	319
Dettes fournisseurs	20	2 030	3 031
Passifs sur contrat client courants (produits différés)	20	2 750	2 594
Provisions courantes	17	235	234
Autres passifs courants	20	4 533	4 742
Passifs courants		**10 821**	**12 849**
Total des passifs		**16 828**	**18 950**
Total des capitaux propres et passifs		**37 994**	**45 718**

Annual results at 31 March 2024

En k€	31/03/2024	31/03/2023
Immobilisations incorporelles	7 843	7 951
Ecarts d'acquisition	497	-
Immobilisations corporelles	1 498	276
Droits d'utilisation	821	375
Actifs financiers	244	281
Actifs d'impôt différé	38	24
Autres actifs non courants	-	-
Actifs non courants	**10 941**	**8 907**
Stocks et en-cours	10 145	250
Créance clients	1 823	87
Actifs sur contrat client courants	177	541
Créances d'impôt courant	-	-
Autres actifs courants	11 590	11 646
Trésorerie et équivalents de trésorerie	11 042	35 476
Actifs courants	**34 777**	**48 000**
Total des actifs	**45 718**	**56 907**

	31/03/2024	31/03/2023
Capital social	4 469	4 469
Primes d'émission	58 682	58 682
Autres réserves	667	797
Report à nouveau	-	-
Résultats non distribués	(37 050)	(27 061)
Autres éléments du résultat global	-	-
Capitaux propres attribuables aux propriétaires de la Société	**26 768**	**36 887**
Emprunts et dettes financières non courants	2 050	3 242
Dettes de loyers non courantes	496	223
Passif au titre des régimes à prestations définies	86	66
Provisions non courantes	-	-
Autres passifs non courants	3 469	630
Passifs non courants	**6 101**	**4 161**
Emprunts et dettes financières courants	1 929	1 501
Dettes de loyers courantes	319	181
Dettes fournisseurs	3 031	4 432
Passifs sur contrat client courants (produits différés)	2 594	-
Provisions courantes	234	5 820
Autres passifs courants	4 742	3 925
Passifs courants	**12 849**	**15 859**
Total des passifs	**18 950**	**20 020**
Total des capitaux propres et passifs	**45 718**	**56 907**

Cash Flow

Half-year results at 30 September 2024

En k€	Notes	30/09/2024	30/09/2023
Résultat net de l'exercice		**(5 416)**	**(3 333)**
Ajustements pour :			
– Amortissement des immobilisations et droits d'utilisation	10.1-10.2-11	626	1 956
– Résultat financier net	7	43	36
– Quote-part dans le résultat de l'entreprise mise en équivalence (nette		-	-
– Résultat de cession d'immobilisations		36	75
– Impôt sur le résultat	8.1	14	(2)
– Charges et produits liés aux paiements en actions		(221)	(215)
– Autres éléments		(1)	(4 339)
Total des ajustements		**497**	**(2 488)**
Total marge brute d'autofinancement		**(4 919)**	**(5 821)**
Variations des :			
Incidence de la var. des stocks et en cours		(3 250)	(5 765)
Incidence de la var. des clients & autres débiteurs		2 954	1 398
Incidence de la var. des fournisseurs & autres créditeurs		(1 075)	655
Total des variations		**(1 371)**	**(3 712)**
Flux de trésorerie générés par les activités opérationnelles		**(6 290)**	**(9 533)**
Impôts payés		449	-
Trésorerie nette liée aux activités opérationnelles		**(5 841)**	**(9 533)**
Incidence des variations de périmètre		-	(250)
Acquisition d'immobilisations corporelles et incorporelles	10.1-10.2-11	(423)	(3 832)
Diminution d'actifs financiers	12	18	33
Trésorerie nette utilisée par les activités d'investissement		**(405)**	**(4 049)**
Cession (acq.) nette d'actions propres		34	-
Augmentation de capital	16.1	-	(20)
Remboursement d'emprunts et dettes financières		(1 146)	(834)
Intérêts versés		(43)	(37)
Trésorerie nette liée aux activités de financement		**(1 155)**	**(890)**
Variation nette de trésorerie et équivalents de trésorerie		**(7 402)**	**(14 473)**
Trésorerie et équivalents de trésorerie à l'ouverture	15	11 039	35 476
Trésorerie et équivalents de trésorerie à la clôture	15	3 637	21 004
Variation de trésorerie nette par les soldes		**(7 402)**	**(14 473)**

Annual results at 31 March 2024

En k€	31/03/2024	31/03/2023
Résultat net de l'exercice	**(9 935)**	**(16 461)**
Ajustements pour :		
– Amortissement des immobilisations et droits d'utilisation	2 572	520
– Résultat financier net	84	71
– Quote-part dans le résultat de l'entreprise mise en équivalence	-	-
– Résultat de cession d'immobilisations	132	597
– Impôt sur le résultat	6	(13)
– Charges et produits liés aux paiements en actions	(130)	773
– Autres éléments	(5 640)	3 497
Total des ajustements	**(2 977)**	**5 446**
Total marge brute d'autofinancement	**(12 912)**	**(11 015)**
Variations des :		
Incidence de la var. des stocks et en cours	(9 488)	*(250)*
Incidence de la var. des clients & autres débiteurs	208	*(9 210)*
Incidence de la var. des fournisseurs & autres créditeurs	3 183	4 001
Total des variations	**(6 097)**	**(5 209)**
Flux de trésorerie générés par les activités opérationnel	**(19 009)**	**(16 475)**
Impôts payés	(1 372)	(382)
Trésorerie nette liée aux activités opérationnelles	**(20 382)**	**(16 857)**
Acquisition d'immobilisations corporelles et incorporelles	(3 417)	(5 970)
Produits de cession d'immobilisations corporelles et incorporelles	-	-
Subventions d'investissement	974	-
Augmentation d'actifs financiers	-	(108)
Diminution d'actifs financiers	36	-
Intérêts reçus		
Trésorerie nette utilisée par les activités	**(2 406)**	**(6 078)**
Augmentation de capital	(53)	(1 685)
Encaissements liés aux nouveaux emprunts et dettes financières	590	81
Remboursement d'emprunts et dettes financières	(2 099)	(1 342)
Intérêts versés	(85)	(72)
Trésorerie nette liée aux activités de financement	**(1 647)**	**(3 018)**
Variation nette de trésorerie et équivalents de trésorerie	**(24 435)**	**(25 953)**
Trésorerie et équivalents de trésorerie au 1er avril	35 476	61 429
Effet de la variation des taux de change sur la trésorerie détenue		
Trésorerie et équivalents de trésorerie au 31 mars	**11 041**	**35 476**

Capital structure and share price

Daily share prices over 1 year with some comparables

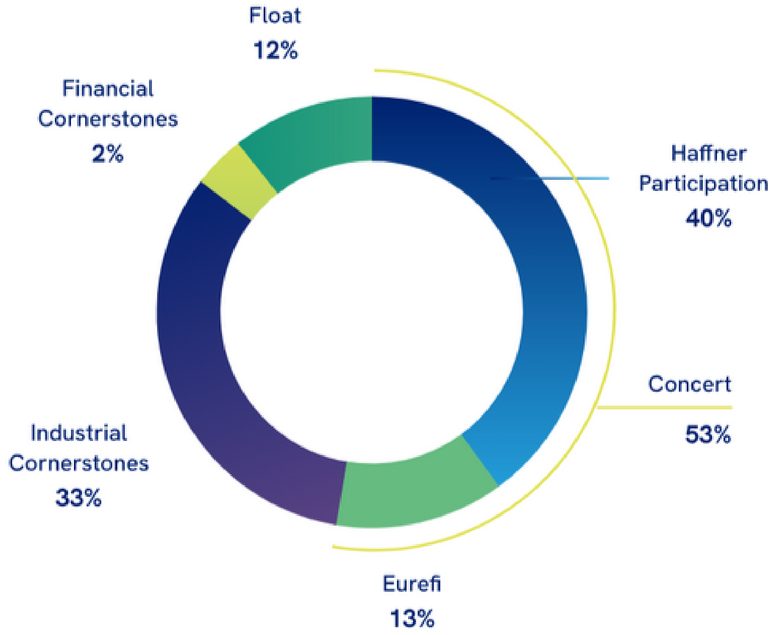
La performance "Total Return" intègre les versements de dividendes sur la période concernée, comme s'ils étaient réinvestis à 100%.
Cours en clôtures

Shareholder structure

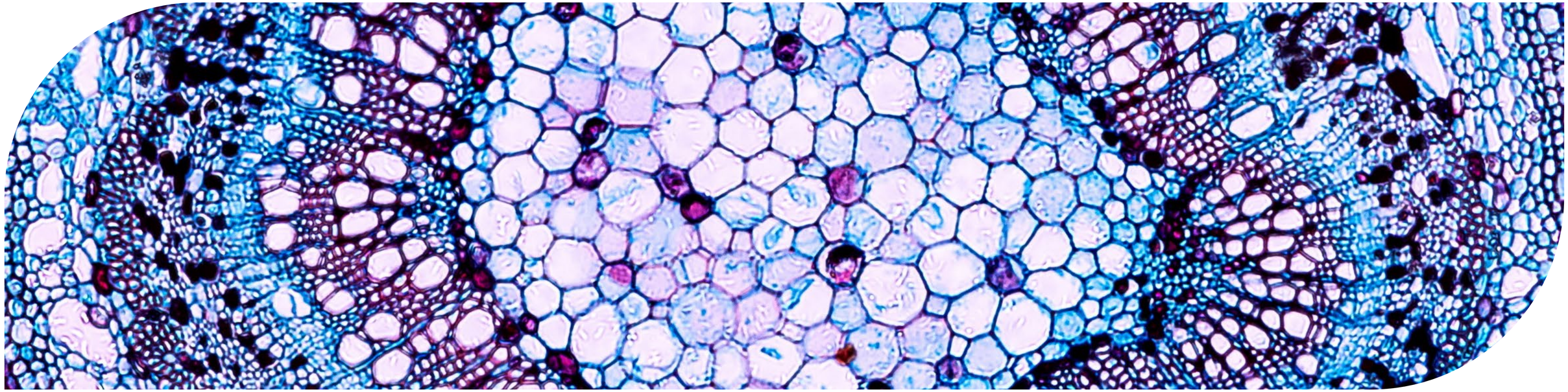
Capital breakdown

As of March 1, 2024, Haffner Energy's share capital consisted of 44,693,457 shares.

Breakdown of share capital as of March 1, 2024 :



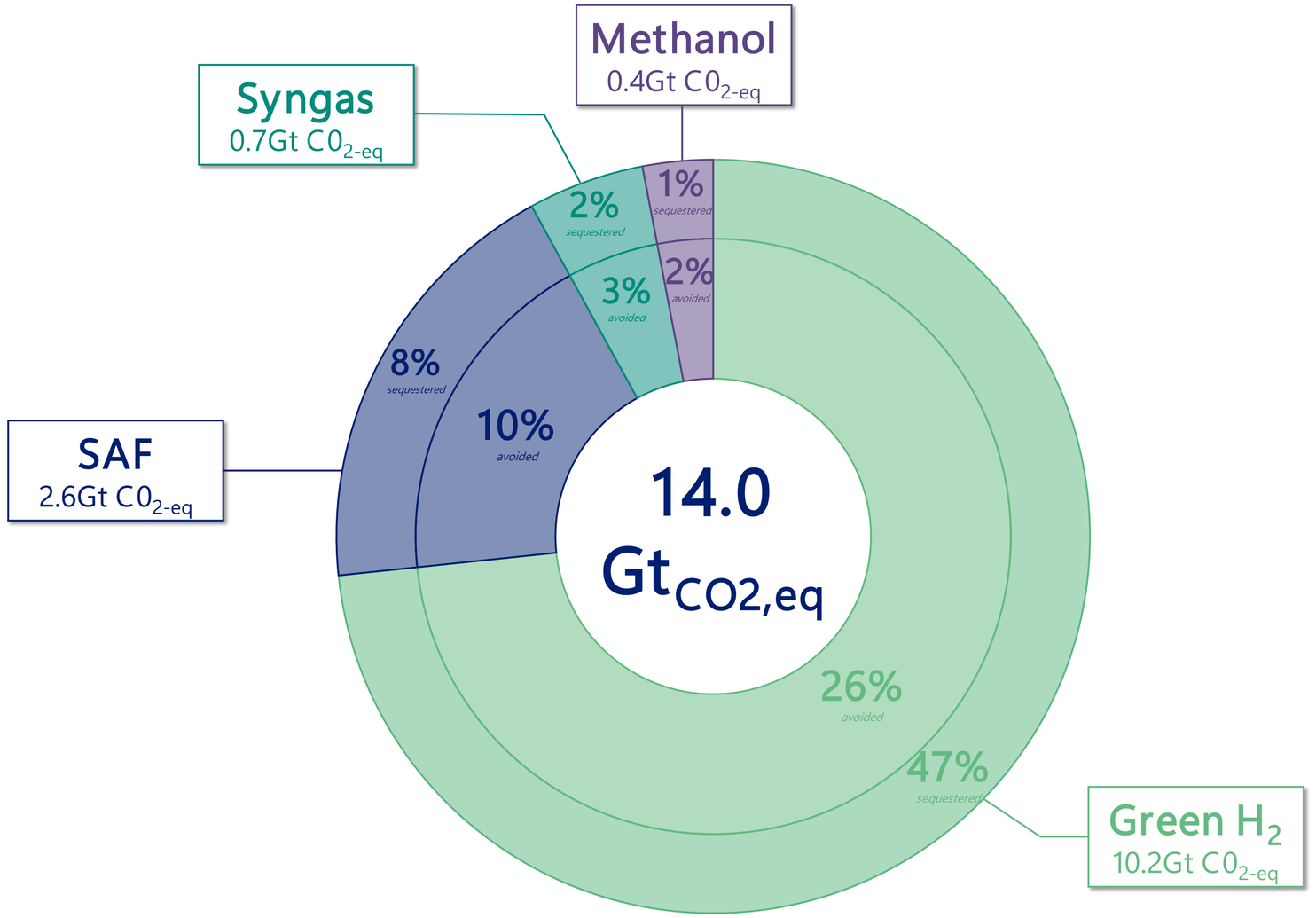
- ISIN Code : FR0014007ND6
- Ticker symbol : ALHAF
- LEI Code : 969500KUNUHC32N0J037
- CFI Code : ESVUFN
- ICB classification : Energy (60102010 – Alternative Fuels)
- Eligibility SRD : No
- Eligibility for PEA : Yes
- Eligibility for PEA PME-ETI : Yes
- Quotation : Continuous
- Worded : Haffner Energy
- Number of shares : 44 693 457
- Date of year end : 31st of Marchs



04 Appendix

Photo : biomasse au microscope

We can prevent 14.0 Gt $CO_{2\text{-eq}}$ emissions by 2050



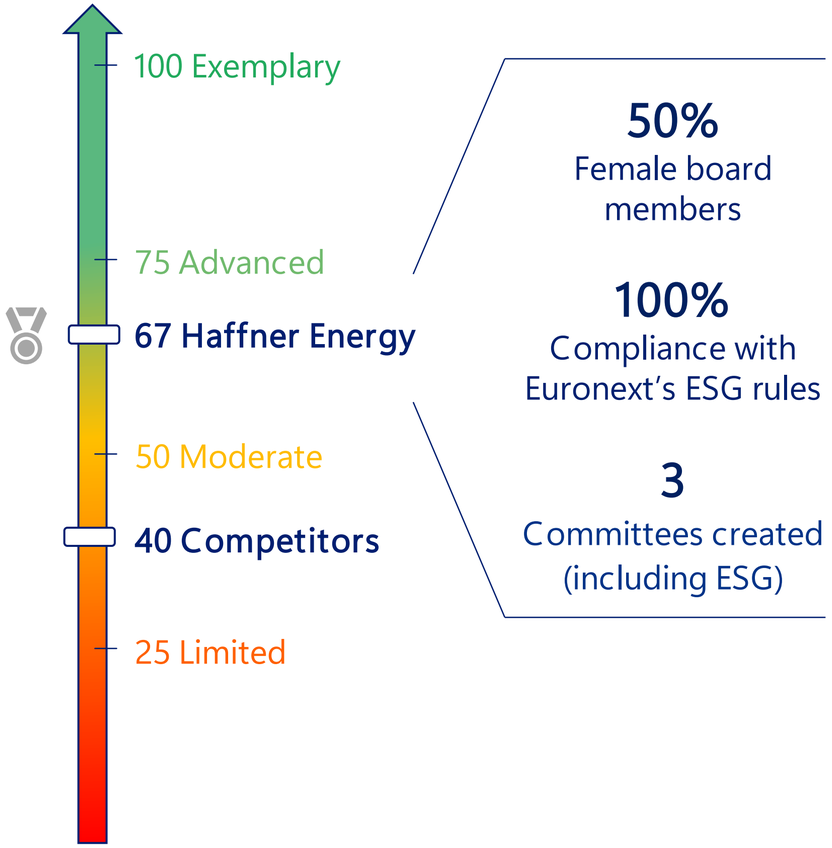
5.8Gt
Total $CO_{2\text{-eq}}$ avoided

⋮

8.2Gt
Total $CO_{2\text{-eq}}$ sequestered

Haffner Energy's ESG performance outshines the market

Haffner Energy's ESG score[1]

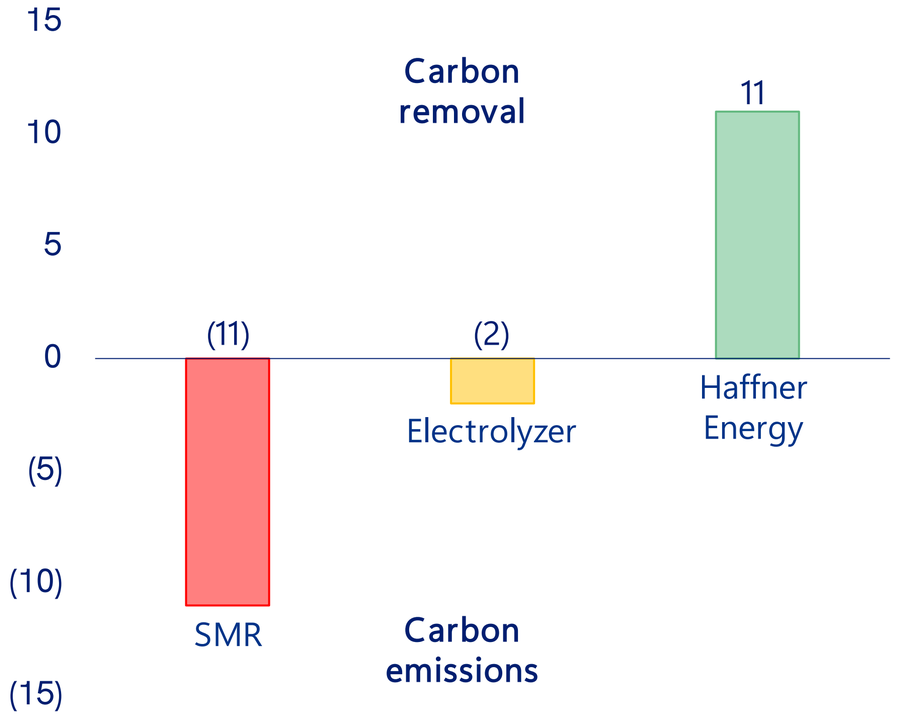


50%
Female board members

100%
Compliance with Euronext's ESG rules

3
Committees created (including ESG)

Carbon impact of H_2 production per technology used[2]
(Kg of CO2 per Kg of produced H_2)



(1) EthiFinance benchmark 2021 (2) EVEA 2021 study commissioned by Haffner Energy

Biochar, a game changer for carbon capture

[illegible]

The solid co-product of thermolysis, a black powder mainly composed of biogenic carbon (>85%).

[illegible]

1 ton of Biochar sequesters 2.9 tons of $CO_{2,eq}$.

Biochar is an excellent agronomic fertilizer and amendment, retaining nutrients, holding water, and improving soils resilience

[illegible]

Biochar generates 2 revenue streams:

- Compost and fertilizers for €200-300 per ton on average.
- Voluntary carbon market.

[illegible]

Biochar improves fluid management and soil's capacity to retain water and nutrients.

Each ton of Biochar sequesters 2.9 tons of CO2, allowing to produce carbon negative hydrogen and clean fuels.

[illegible]

Biochar can also be used as a sustainable construction material (thermal insulation).

(1) CCU stands for Carbon Capture Utilization (2) CCS stands for Carbon Capture Storage

Biogenic CO_2, a highly demanded co-product

[illegible]

Biogenic carbon is carbon which has been captured in the atmosphere. Biomass is composed of 50% biogenic carbon and biogenic CO_2 is CO_2 made from biogenic carbon and oxygen.

[illegible]

SAF production via ASTM-approved pathway always requires H_2 and CO_2. A part of biogenic CO_2 is used to make SAF in the SAFNOCA process and surplus production can be used to produce E-SAF or monetized.

[illegible]

Biogenic CO_2 can be sold as a product with CCU[1] for €100 per ton.

[illegible]

Biogenic CO_2 captures CO_2 by using CCS[2] technology.

[illegible]

Biogenic CO_2 can be directly re-used in the production system of e-fuels, chemical feedstock and building materials.

(1) CCU stands for Carbon Capture Utilization (2) CCS stands for Carbon Capture Storage

Biocarbon, a major asset for competitive e-fuels generation

« [illegible]

Biocarbon is the same product as biochar, but for e-fuels generation instead of agriculture and carbon capture.

The solid co-product of thermolysis, a black powder mainly composed of biogenic carbon (>85%).

Biocarbon is gasified on the site of the e-fuels production, generating a syngas providing the required biogenic carbon. Gasification can be carried out by Haffner Energy, generating an additional recurring revenue.

Biocarbon is a very interesting asset as it will easily be subject to long-term offtake contracts, while having a global economic value that is superior or equal to biochar

« [illegible]

For many remote e-fuels projects, where wind or sunlight are abundant but biomass or local sources of biogenic CO2 scarce, biocarbon will be the only solution to make the projects viable

[illegible]

Biocarbon will always be more competitive than biogenic CO2 if the CO2 source is not located on-site at the e-fuels plant or distributed by pipeline, and/or if the electricity cost is above €20 per MWh (which is the case in most situations).

[illegible]

Biogenic CO2 logistics can have a significant carbon footprint, which is not the case for biocarbon, a 100% renewable product.

[illegible]

Biocarbon can be stored for months, providing strong security and flexibility to e-fuels producers while halving their hydrogen generation needs for a given e-fuels production, as biocarbon is also an energy source, unlike biogenic CO2.

A family-controlled business with a highly experienced team

Philippe Haffner
Co-Founder
Chairman & CEO

30+ years in industrial management and international sales

&

Marc Haffner
Co-Founder
Deputy CEO & CTO

25+ years in energy project management, design and construction

Marcella Franchi
Chief Marketing Officer, Head of SAF

30+ years in business management, academia and entrepreneurship

Michaël Zabera
Chief Financial Officer

30+ years in finance, project management and digitalization

Roch Bommier
Industrial Director

20+ years in project management, operations and industry

Laure Bourdon
Chief of Staff, Com. Director

20+ years in management, strategy consulting and public affairs

Pascaline Kishtoo-Denis
Legal & HR Director

10+ years in international project management and innovation

Note: Flags correspond to past international exposure

Haffner Energy in a nutshell

- Haffner Energy addresses 6 multi-billion-euro markets that are expected to grow 91-fold by 2050 reaching €1,603 bn
- The Hypergas Module® is a proprietary and stackable technology producing 4 clean fuels and 2 decarbonization co-products
- Being biomass and waste agnostic constitutes a unique and major differentiation making projects profitable that were not
- With over 30 years of R&D and projects, Haffner Energy is ready to scale up and reach large-scale deployment phase
- Haffner Energy is a credible solution to decarbonize the most polluting industries and prevents the planet up to 14 Gt $CO_{2\text{-eq}}$ by 2050
- Biomass is required for all liquid clean fuels, as it is the only viable pathway to provide the necessary biogenic carbon

Glossary

1 **ASTM International**

Develops and publishes voluntary consensus standards for sustainable aviation fuel.

2 **Biogenic CO_2**

Carbon dioxide naturally produced by biological processes, like respiration and organic matter decomposition.

3 **CCS & CCU**

CCS technology captures CO_2 emissions from industrial processes and CCU technology converts them into products

4 **EPCM & EPC project**

Engineering consulting project where the client has minimal to no control over the project strategy

5 **Fischer-Tropsch & ATJ process**

Chemical reaction used to convert a mixture of carbon monoxide and H_2 into liquid hydrocarbons.

6 **PSA (Pressure Swing Adsorption)**

Gas separation process used to separate one or more components from a gaseous mixture.

7 **Thermolysis**

Process in which a compound is decomposed into simpler substances by the application of heat.

8 **WGSR (Water-Gas Shift Reaction)**

Chemical reaction in which carbon monoxide and water vapor react to form CO_2 and H_2.

Thank you

Philippe Haffner
Co-founder, Chairman and CEO
philippe.haffner@haffner-energy.com

Michaël Zabera
Chief Financial Officer
michael.zabera@haffner-energy.com

Haffner Energy

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