



June 2023

Information Memorandum – Series A

Pioneer CleanTech in Waste Heat Recovery

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This IM is only meant to provide to its recipients an initial basis for understanding and assessing interest in the potential equity financing of the Target (the “**Transaction**”). Under no circumstances does it constitute a legally binding offer to finance the Target or assets described in this document.

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All information contained in this document shall be considered Confidential Information.

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EXECUTIVE SUMMARY



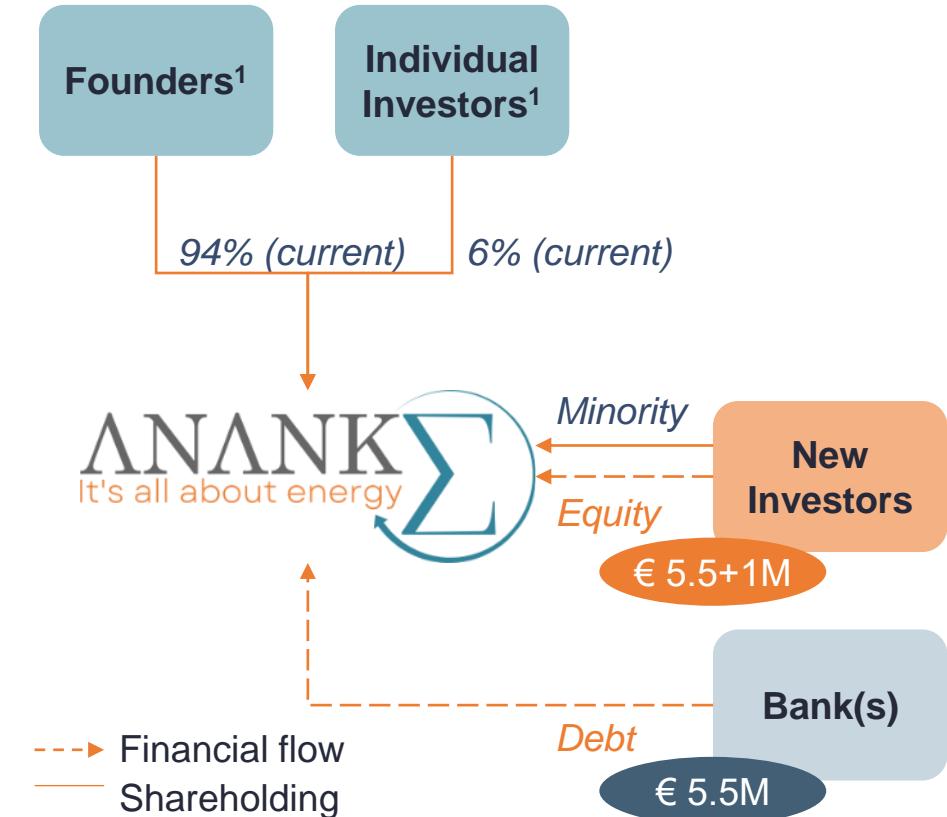
Transaction Overview

Acquire a minority stake in a French pioneer CleanTech specialist in waste heat recovery in industry

Investment summary

Transaction	<ul style="list-style-type: none"> Series A equity raising of € 6.5M (capital increase)
Target	<ul style="list-style-type: none"> ANANKÉ, a French CleanTech active across the whole industrial waste heat recovery value chain Founded in 2017 in Belfort
Cutting-edge and proprietary technologies	<ul style="list-style-type: none"> ETNA: fumes and waste diagnostic Two proprietary cogeneration technologies: KEOS module (heat to heat + compressed air) and IONEX module (heat to heat + electricity) First KEOS turnkey contract executed with Cristel, in France (commissioned in Mar-2022)
Use of funds	<ul style="list-style-type: none"> € 5.5M to industrialize KEOS and IONEX production and accelerate sales € 1M asset financing (utility sale model)
Ambition	<ul style="list-style-type: none"> Deploy internationally a pipeline of ca. 400 modules (KEOS and/or IONEX) by 2028
Timing	<ul style="list-style-type: none"> Closing of the Transaction by Q4 2023

Targeted structure



(1) See details in Appendix

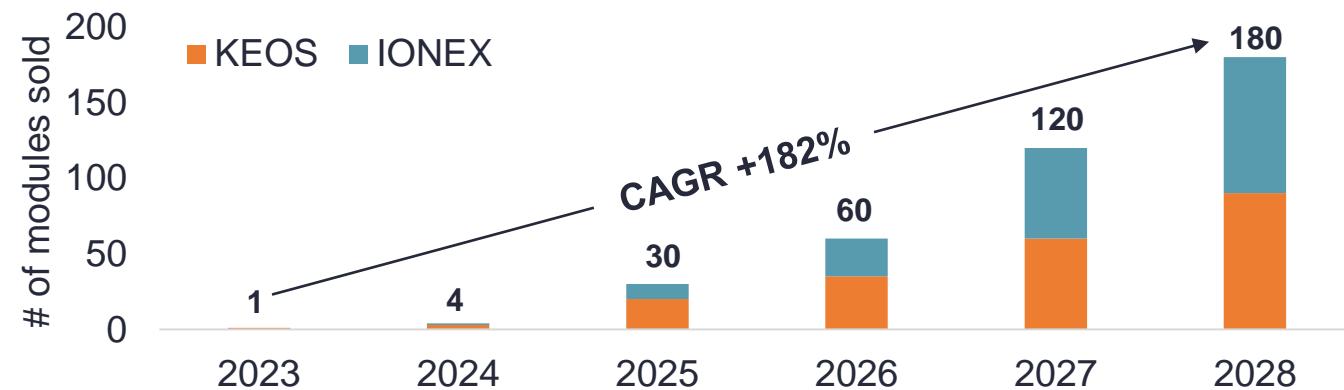
Target Overview

ANANKÉ, a French CleanTech with strong expertise across the whole industrial waste heat recovery value chain

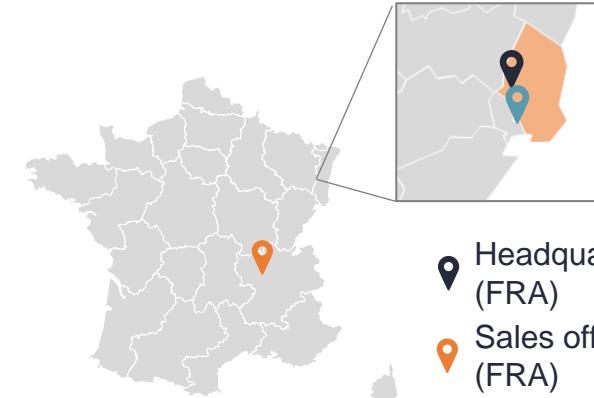
Presentation of the Target

- **Mission:** contribute to answering industry's energy challenges: (i) energy sovereignty, (ii) energy efficiency, and (iii) energy decarbonization
- **Activity:** specialist in waste heat recovery in industry, from waste characterization, to equipment manufacturing, project implementation and maintenance, including installation of proprietary (KEOS / IONEX) or third-party equipment and technologies
- **Start:** founded in 2017 in Belfort (FRA) by 4 experts on energy efficiency and energy transition
- **Team:** 20 professionals, including the 4 founders and 16 full-time employees, backed by a solid advisory committee

Ambition



Geographical footprint



- Headquarters, Belfort (FRA)
- Sales office, Bron (FRA)
- First turnkey installation, Fesches-le-Châtel (FRA)

Pictures



Investment Highlights

Key competitive advantages allowing ANANKÉ to become a leader in waste heat recovery in industry

Strong market fundamentals



- Heavy burden of **energy bill** (electricity / gas) and **carbon footprint** for industrials currently
- Ambitious targets set by the EU to **decarbonize energy mix** (Net Zero Industry Act)
- Favorable regulatory framework** with strong government support / subsidies in France

Best-in class patented technologies



- ETNA**: a proprietary waste heat **diagnostic tool**
- Two proprietary patented cogeneration technologies based on **Ericsson engine**:
 - KEOS**: from heat to {heat + compressed air} (entering industrialization phase)
 - IONEX**: from heat to {heat + electricity} (under development)

Solid business model



- Equipment sale (proprietary or 3rd-party)**: reasonable upfront investment for industrials and immediate energy savings leading to **average paybacks** of 2 to 3 years on a typical project
- Utility sale or leasing**: capacity for ANANKÉ to offer **financed asset solutions** too

Experienced team in place



- Four co-founders, former engineers at **ASSYSTEM**, a group specialized in engineering for energy transition projects
- Operational team of **~20 people**, mostly R&D, innovation, and sales positions
- Advisory committee of energy efficiency experts

Strong backlog



- First KEOS turnkey contract signed with **Cristel** and successfully implemented in 2022
- Market traction well established, with **€ 130K operational revenue** (excl. grants) over the last two years and **ca. € 700K orders** at an advanced stage of negotiation for 2023
- Pipeline of ca. **400 modules** to be sold in the next 5 years in France and Europe

Scope for further capital increase



- Room for future fundraisings** in the coming years (Series B, C...) with third-party investors willing to participate to the roll-out of ANANKÉ's ambition internationally

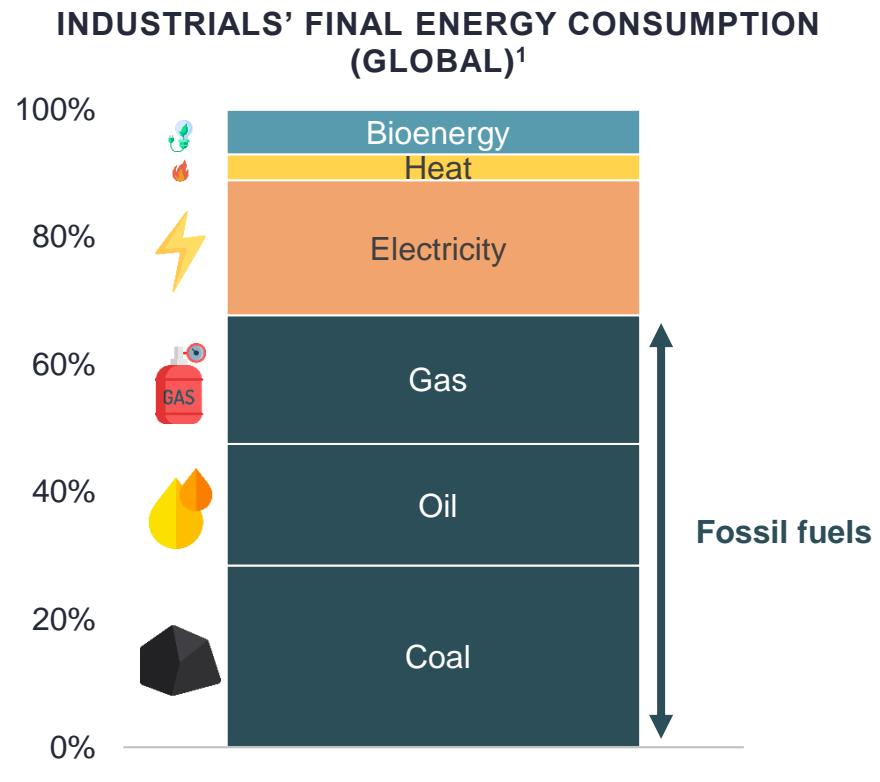


1. MARKET OPPORTUNITY

Industry is Responsible for ca. 25% of GHG Emissions Globally

Industrials are among the most polluting sectors, mainly due to an intensive use of carbon-based energy

Industrials' energy supply is highly carbon-intensive...



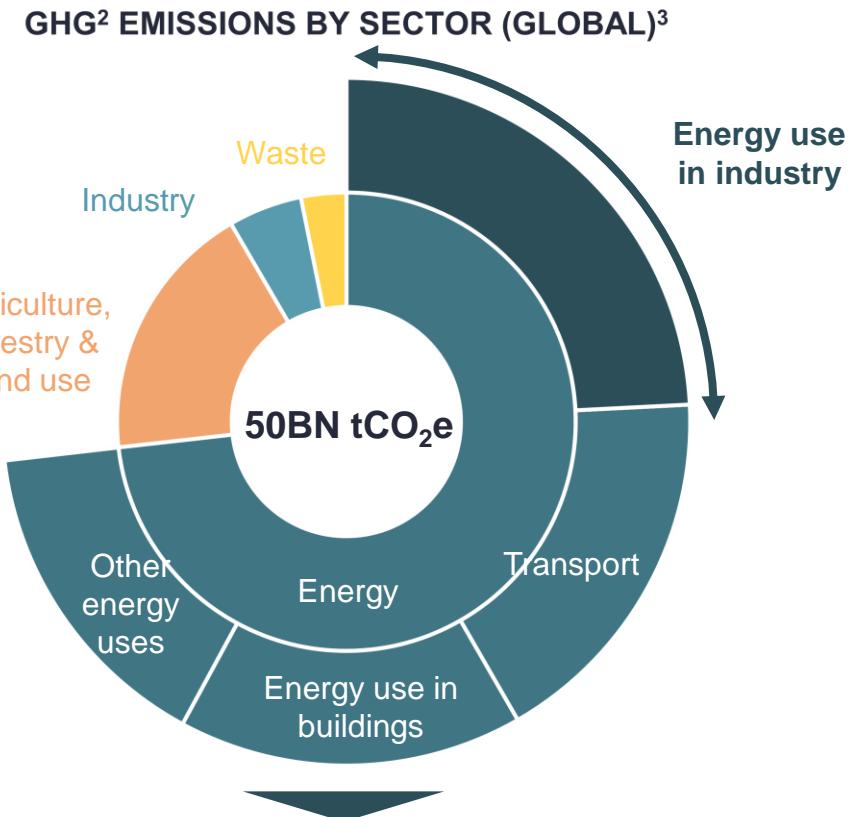
- Ca. 70% of industry's final energy consumption relying on fossil fuels

(1) Source: IEA

(2) Greenhouse gases

(3) Source: Climate Watch, the World Resources Institute

... leading to a strong carbon footprint globally



- Energy use in industry weighing ca. 25% of global GHG emissions
- Three subsectors responsible for 75% of the sector's emissions: chemicals, metals, construction

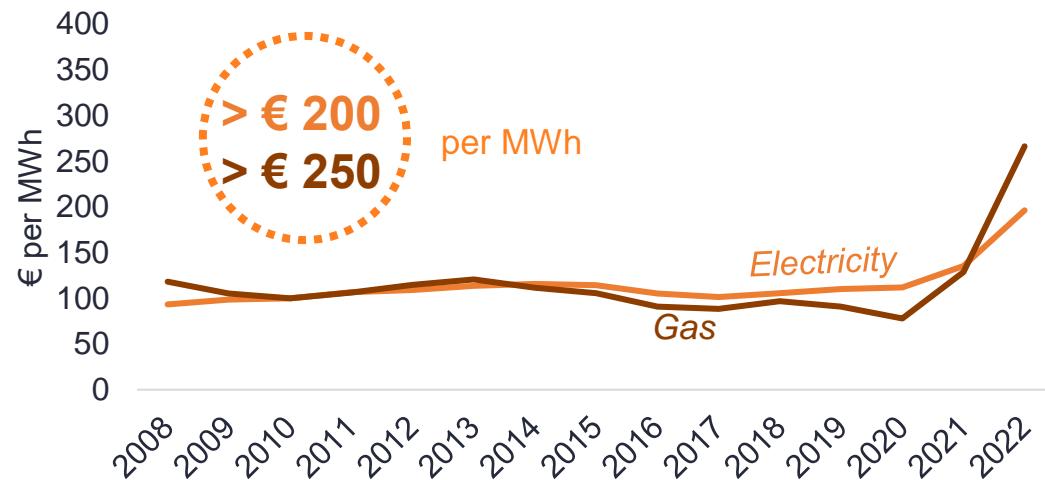
Energy and Carbon Bills are a Real Burden for Industrials

Sustained high inflation is weighing on industrials' operational costs

An impressive surge in energy prices recently ...

- Energy bill for French industrial sector amounting to € 17.1BN in 2021 → increase of > 45% vs. 2020 (highest level since monitoring started in 2005)
- +142% in gas prices between 2021 and 2022¹
- Electricity prices applied to industrial customers expected to increase by ca. 85%¹ in 2023 compared to 2022

ELECTRICITY AND GAS SPOT PRICES IN FRANCE – BASELOAD



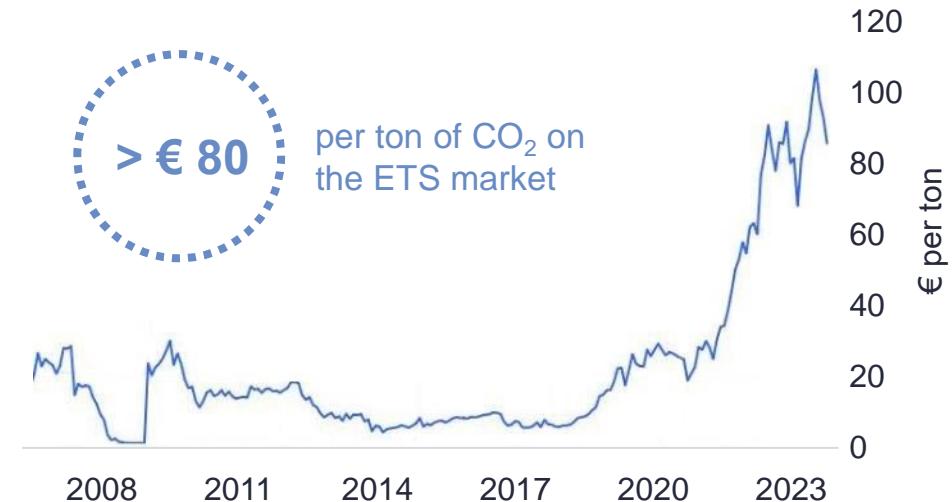
Source: INSEE

(1) Source: INSEE

... as well as in carbon prices

- Emissions Trading Scheme (ETS) requiring European companies in energy-intensive and emissions-intensive industries to buy allowances for their emissions
- Polluting industries forced to find solutions to limit financial impact of the recent massive rise in carbon ton's price

EU CARBON PERMITS PRICES



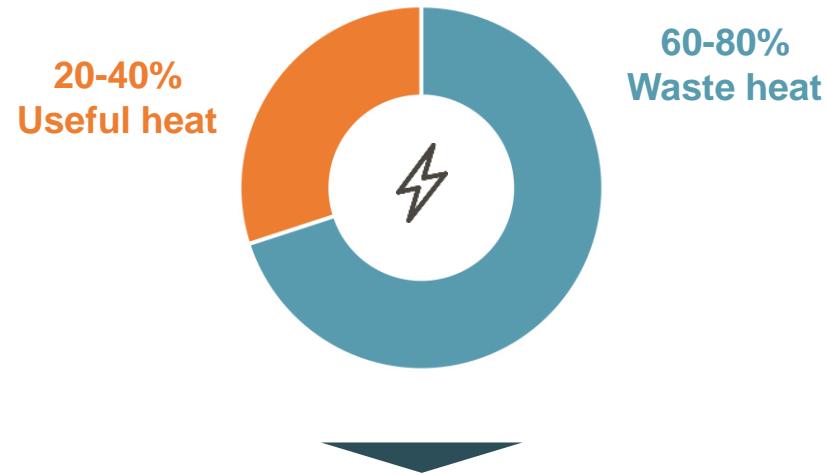
Source: Trading Economics

Industrials are Forced to Urgently Focus on Energy Efficiency

Recovering wasted energy is a key lever for industrial players facing energy challenges

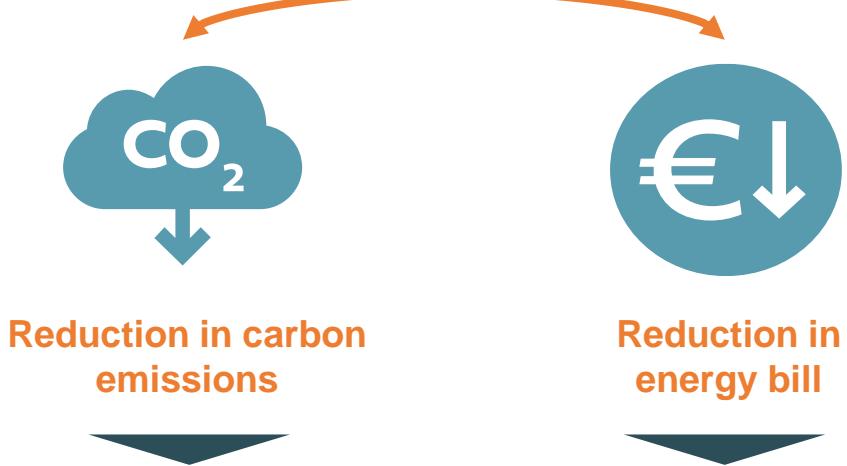
Up to 80% of heat in industrial processes is wasted...

ENERGY USED IN AN INDUSTRIAL HEATING SYSTEM



... pleading for implementing heat recovery solutions

Dual benefit



- Most of the energy lost from industrial equipment and processes **lost as heat** (fumes, openings, walls, conveyors...)
- Energy weighing **10% to 60%** of production costs on average in industry

- Potential of **4BN tCO₂** avoided by 2050 with waste heat recovery (ca. 10% of current global CO₂ emissions)
- Estimated energy cost **savings of 6% to 36%** with waste heat recovery technologies

Industrial Waste Heat Recovery's Market is Massive

An immediate obtainable market of € 700M in France, with a potential to capture up to € 75BN globally



Targeted sectors

Energy-intensive industries, e.g., steel, glass, chemicals, construction materials

Geographical coverage

France

Europe

Global

Key targeted regions

- Hauts-de-France¹
- Grand-Est¹
- Auvergne-Rhône-Alpes
(e.g., Vallée de la Chimie) ¹

- Netherlands
- Germany
- Italy

- Mexico
- Brazil

Potential of waste heat recovery

46 TWh/y

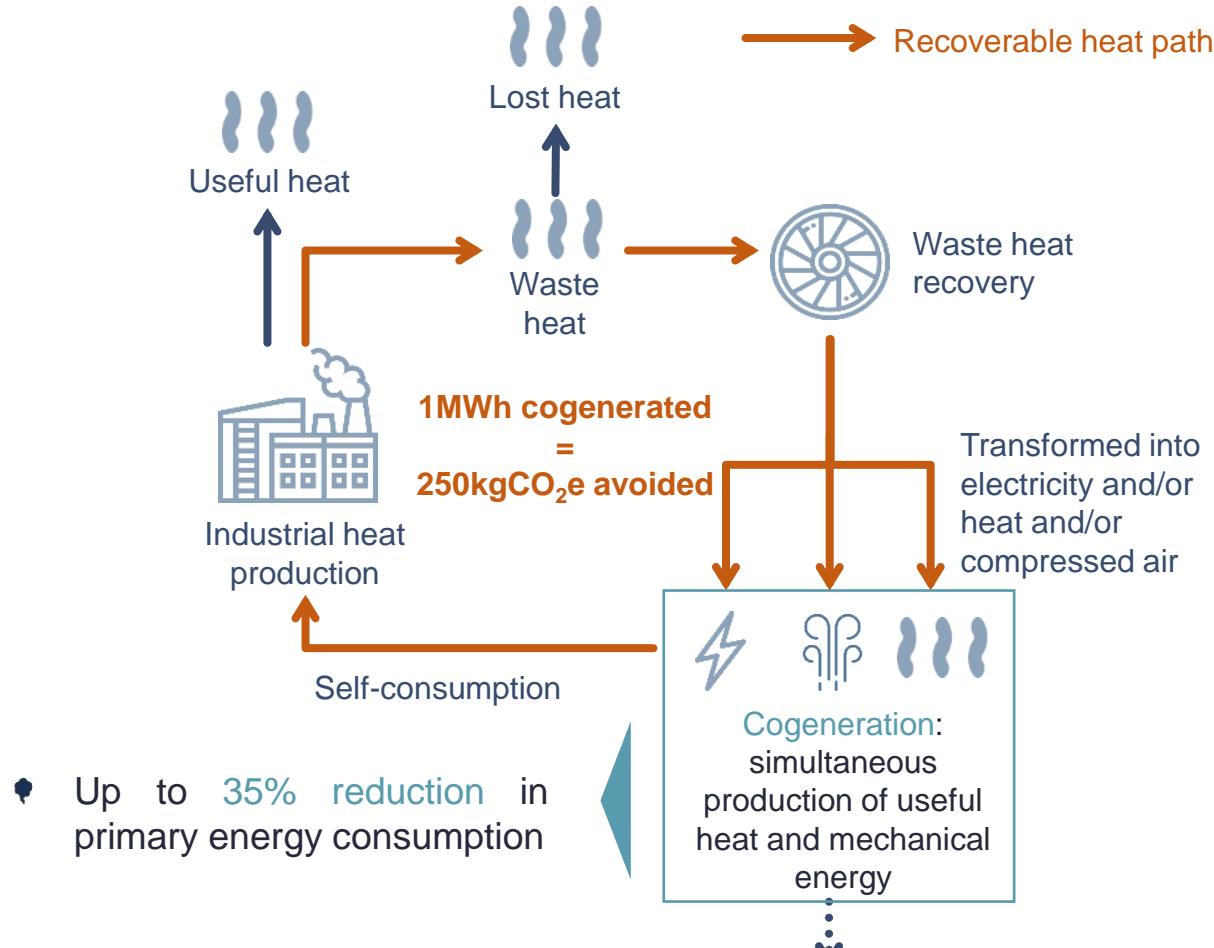
450 TWh/y

3,700 TWh/y

Recovering Waste Heat Represents an Untapped Potential

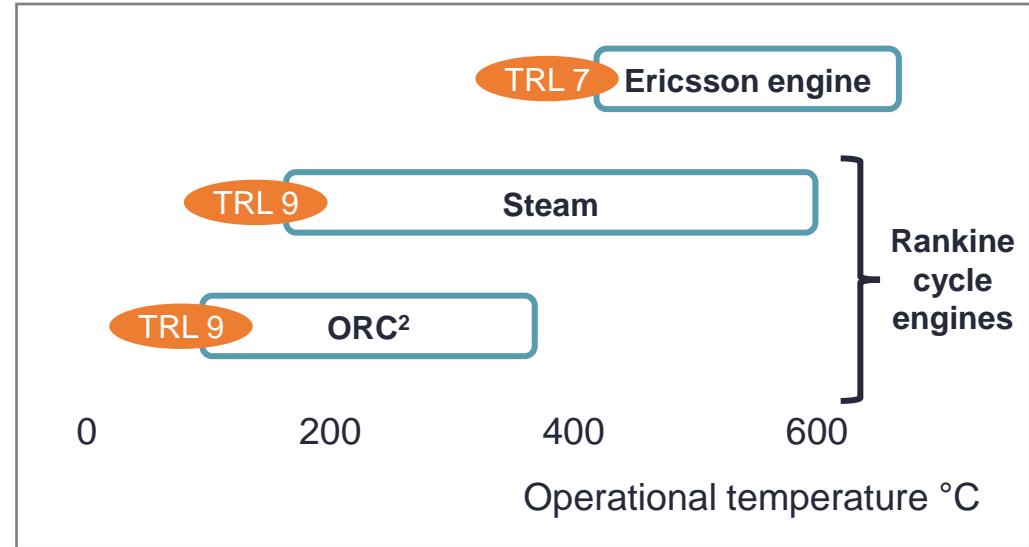
Waste heat can be recycled in the form of heat and co-products such as electricity, compressed air etc.

From waste heat to cogeneration – key principles



(1) Technology readiness level Resale to electricity or heating networks
 (2) Organic Rankine Cycle

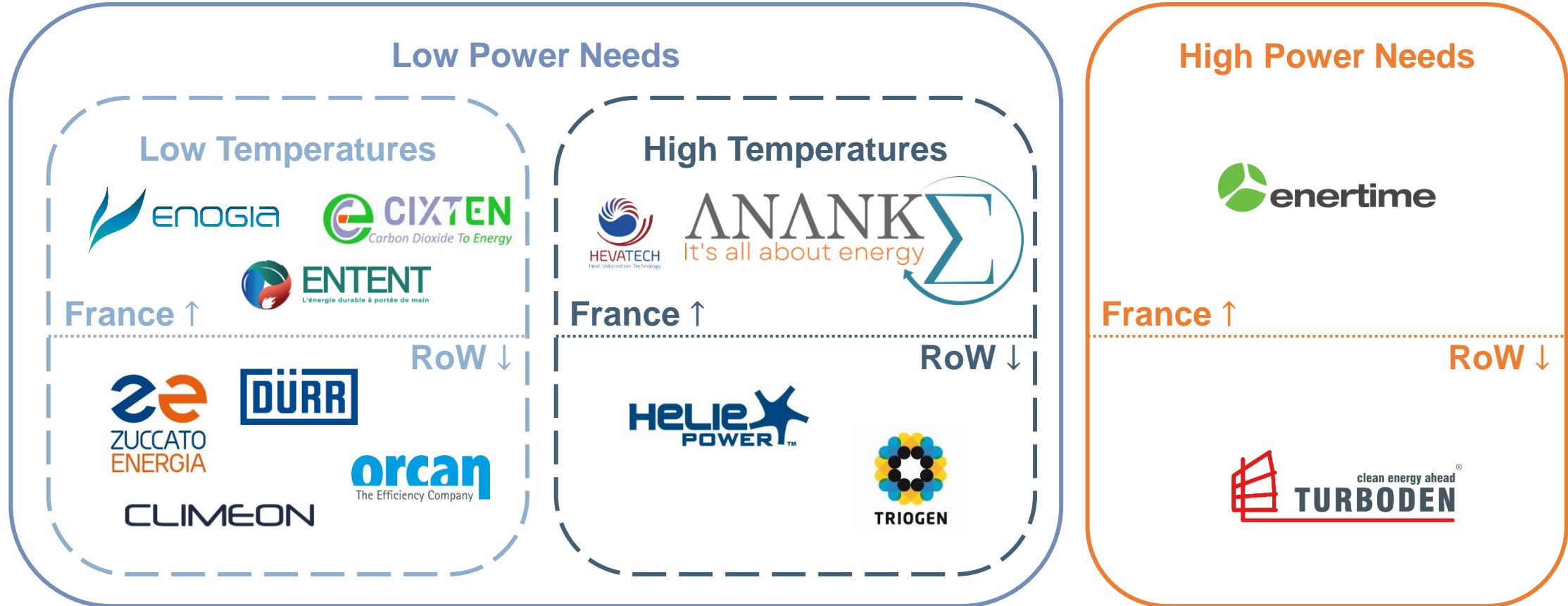
From waste heat to cogeneration – technologies



- Several technical solutions available to recover waste heat and convert it into mechanical / electrical energy
 - Different engines types
 - Different operating temperatures
 - Different TRL¹

Competitive Landscape

Several active players positioned on waste heat recovery's market with a mature technology (TRL > 6)



Global Awareness around Industrial Waste Heat Recovery

World press taking on waste heat recovery as a hot topic



Harnessing Waste Heat Could Save Europe €67 Billion

- Excess energy is enough to meet region's heat, hot water needs
- Technology to reuse surplus already available: Danfoss

By Celia Bergin

22 février 2023 à 01:01 UTC+1 Updated on 22 février 2023 à 10:39 UTC+1

Europe's industries and transportation systems waste so much heat that capturing the excess and reusing it could save consumers more than €67 billion (\$71.3 billion), a Danish engineering company said. The surplus produced each year by factories, supermarkets, wastewater facilities, data centers and subways amounts to 2,860 TWh, nearly the same as the EU's total demand for heat and hot water in residential and service-sector buildings, Danfoss Energy said.

Source: [Bloomberg](#), 22/02/2023



Recapturing excess heat could power most of Europe, say experts

Preventing heat waste largely being ignored as solution to energy crisis, say environmental campaigners



Source: [The Guardian](#), 23/02/2023



Les Echos

TRIBUNE

Opinion | Industrie : pensons d'abord décarbonation et efficacité énergétique ☀️

Pour lutter contre le dérèglement climatique tout en préservant leur compétitivité, les industriels français doivent concilier décarbonation et efficacité énergétique de leurs procédés de fabrication. Les technologies numériques pour le pilotage de l'énergie sont au cœur de ce potentiel, estime Laurent Bataille.

Plus que jamais, les coûts de l'énergie sont au cœur des réflexions stratégiques des industriels. Il en va de leur compétitivité, voire dans certains cas de leur survie. Certaines usines ont ainsi dû restreindre, voire carrément interrompre leur activité comme Cofigeo (marques William Saurin) dont la plupart des sites de production français étaient à l'arrêt début janvier. On peut citer également Duralex ou Arcelor Mittal qui avaient éteint leurs « fours » fin 2022.

Source: [Les Echos](#), 10/03/2023

Energy Efficiency Regulatory Landscape – focus on France

France has been continuously ahead of other European countries in terms of environmental regulations

Energy Savings Certificates (CEE)

- 2019 Pact Law allows facilities subject to the European Trading Scheme (ETS) to benefit from the energy saving certificates mechanism

Mandatory Energy Audit

- Mandatory audits for large firms (with more than 250 employees or revenues exceeding € 43M)
- Analyse of the incoming and outgoing energy forcing them to consider energy efficiency issues

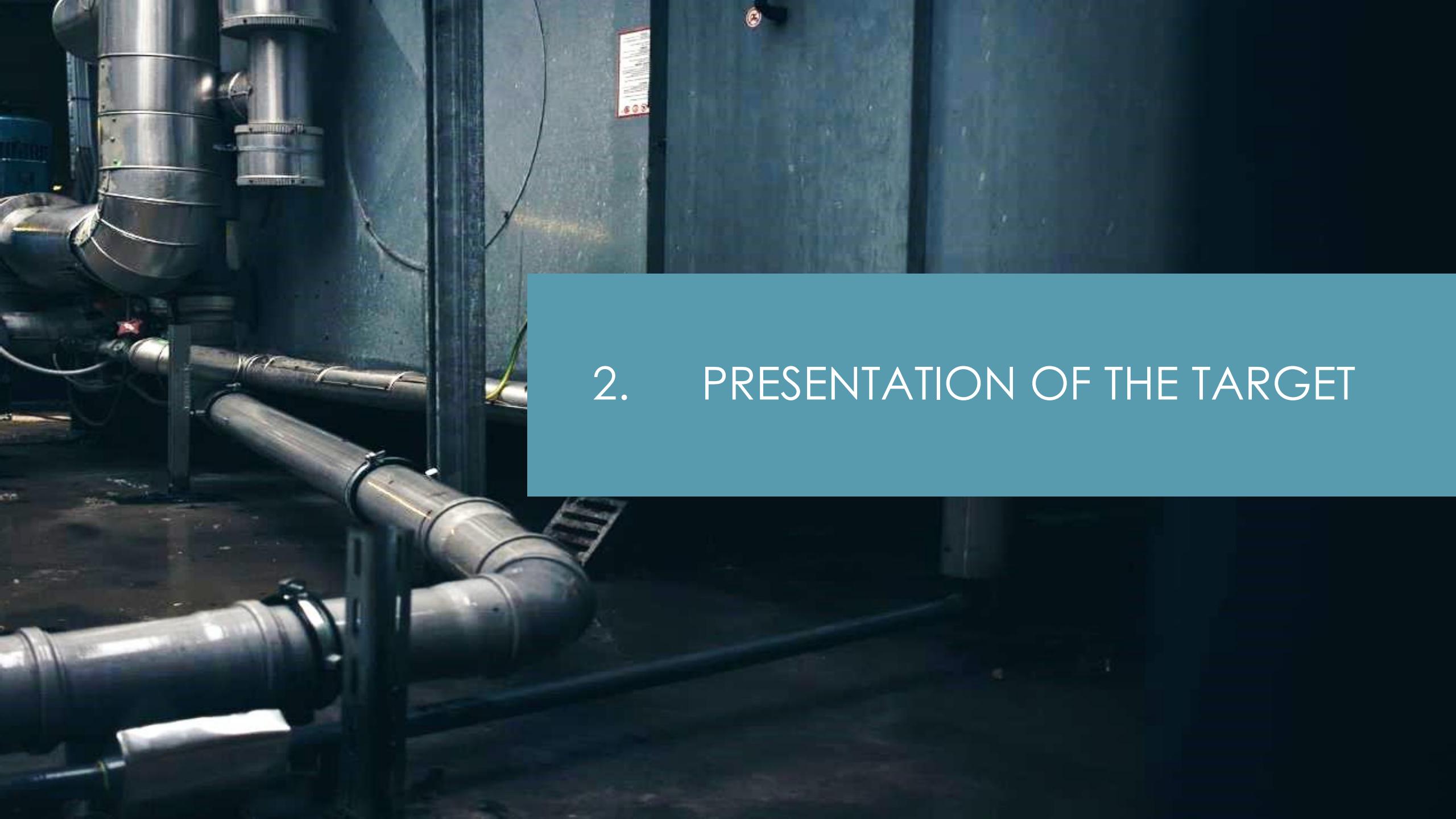
A wide variety of support programs to finance & promote energy efficiency

ADEME Heat Fund

- € 520M subsidy financing program in 2022 (renewed with € 520M by 2023)
- Enable to support new heat recovery technologies and encourage R&D
- Eligibility: 1GWh of annual heat recovery

Energy Savings and Green Loans

- Size: loans ranging from € 50K to € 5M, provided by Bpifrance
- Target: SMEs looking to implement energy transition projects

A photograph of a complex industrial piping system. The pipes are made of metal and are painted dark blue or black. There are several vertical pipes on the left, some with silver-colored insulation. A horizontal pipe runs across the center. Various valves, fittings, and a small red rectangular sign with white text and symbols are visible. The background is a dark, textured wall.

2. PRESENTATION OF THE TARGET

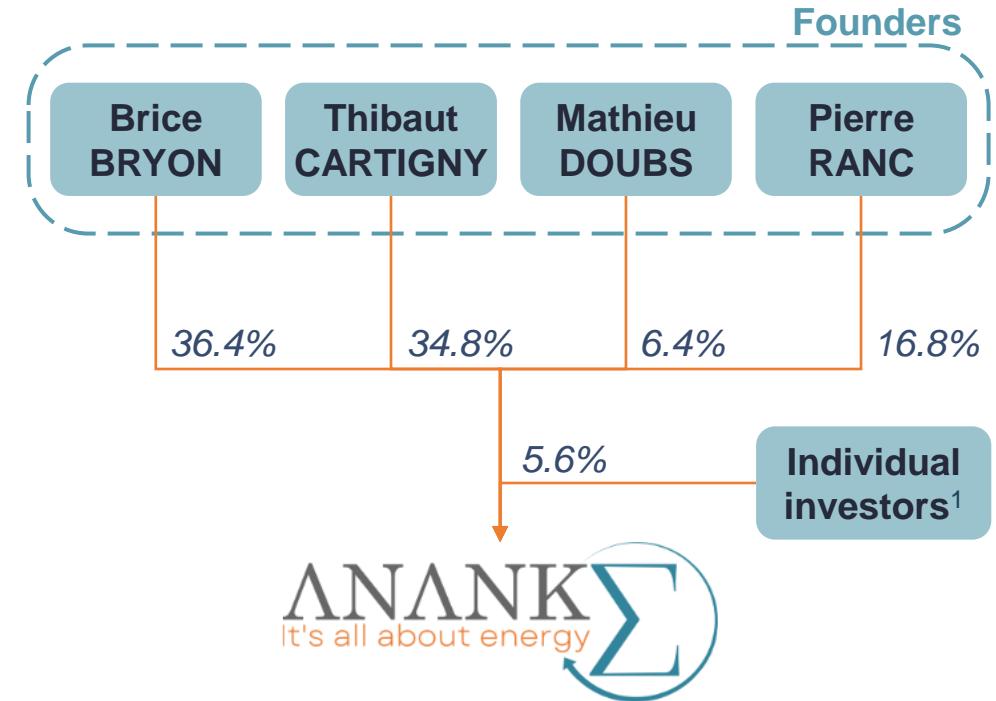
Overview

ANANKÉ, a pioneer CleanTech specialized in waste heat recovery in industry

Key information

Name	• ANANKÉ (SAS)
Headquarters	• France (Belfort)
Start	• 2017
Shareholding	<ul style="list-style-type: none"> • 100% private investors (4 founders + individuals)
Main activity	<ul style="list-style-type: none"> • Solutions provider across the whole value chain of waste heat recovery in industry: diagnostic, equipment manufacturing, equipment installation, operation and maintenance • Fumes diagnostic technology: ETNA • Two proprietary cogeneration technologies: KEOS (heat to {heat + compressed air}) and IONEX (heat to {heat + power})
Assets	<ul style="list-style-type: none"> • First project commissioned in Mar-22 (KEOS) • Target: ca.400 modules sold within next 5 years

Current shareholding structure



(1) See details in [Appendix](#)

Vision and Mission



VISION

- 👉 Energy waste is a threat to the climate
- 👉 We need to focus not only on decarbonizing our energy, but also on recovering and valorizing wasted energy
- 👉 Industry is among the most wasteful sectors in terms of energy, notably with waste heat

MISSION

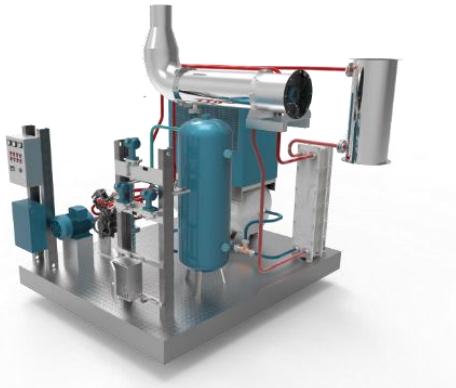
- 👉 Contribute to answering industry's energy challenges: sovereignty, efficiency, and decarbonization
- 👉 Stand as the global specialist in recovering waste heat in industry by providing tailor-made solutions
- 👉 Become a reference for mini-cogeneration in industry thanks to best-in class technologies

History

Years of intense R&D to bring to market innovative waste heat recovery and cogeneration solutions for industry

2017

- Foundation of ANANKÉ by 4 former engineers of ASSYSTEM group
- R&D and start of pre-industrialization of the external combustion engine (Ericsson based), which will become the basis of the two future proprietary technologies of waste heat recovery through cogeneration



2019

- Turning point of ANANKÉ's development: new hirings & strategic collaborations
- Joined Réseau *Entreprendre*, a French association supporting entrepreneurs
- Set up of ETNA, an innovative fume diagnostic tool allowing to characterize waste heat's recovery potential



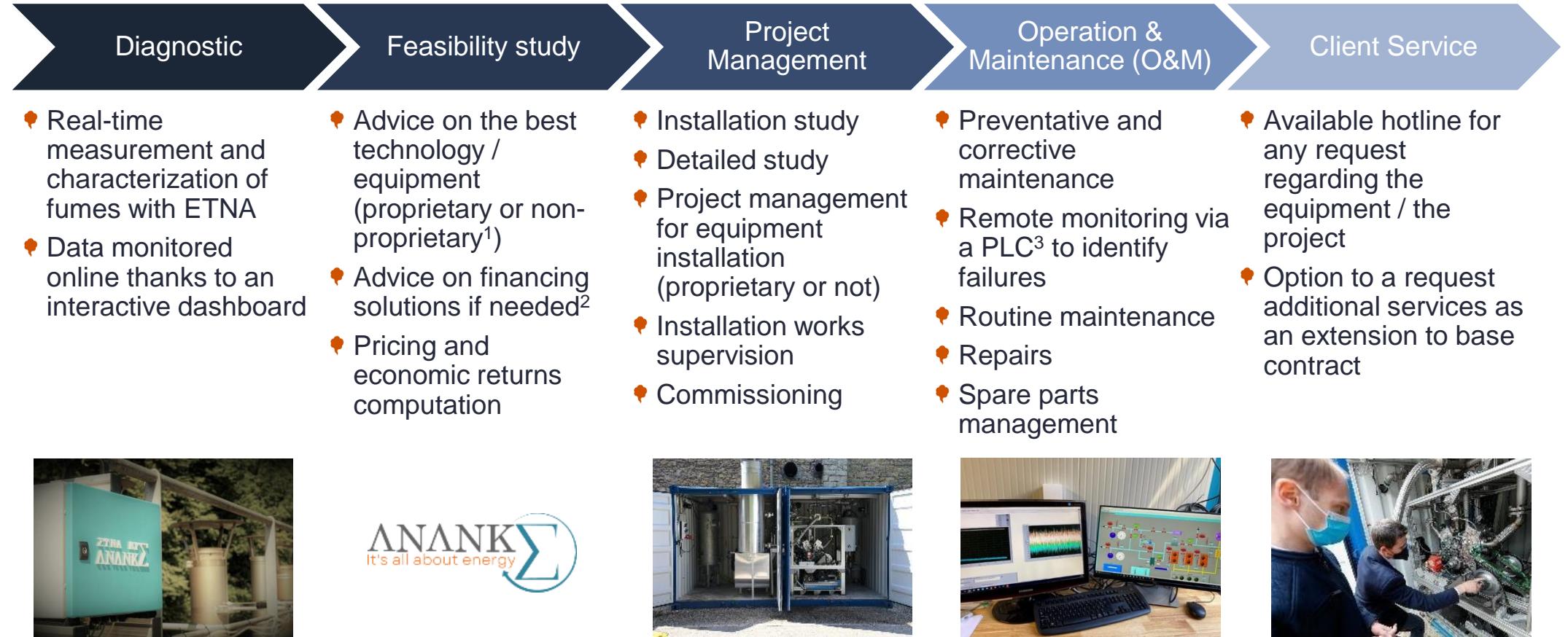
2022

- First KEOS module sold to the French cookware manufacturer Cristel:
 - Installation of ETNA to monitor and characterize fumes
 - Installation of one KEOS module unit to recover waste heat and convert it into useful heat and compressed air



Key Activities

Tailor-made solutions for waste heat recovery, from diagnostic to installation and O&M



R&D activities and collaborations with external partners

(1) Non-proprietary technologies include all types of equipment involved in the recovery of waste heat i.e. ORC, heat exchanger...

(2) E.g., Kyotherm, third-party financing for renewable heat production and energy efficiency projects > € 500K

(3) Programmable Logic Controller

Business Models

Three different models offered, depending on the client's needs

Equipment sale

Turnkey installation

- The client purchases the asset
- ANANKÉ installs and operates the asset on behalf of the client

Utility sale

Utility sale agreement

- The client purchases utilities (heat, compressed air, electricity...) against a negotiated price
- ANANKÉ installs and operates the asset, kept on its balance sheet

Leasing

Equipment rental

- The client rents the asset against a fixed price paid monthly, regardless of the equipment use
- ANANKÉ installs and operates the asset, kept on its balance sheet

The client's economic return on investment relies on energy savings thanks to heat recovery equipment installed on site

No upfront investment is required from the client

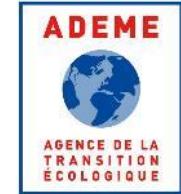
A Solid Network of Partners

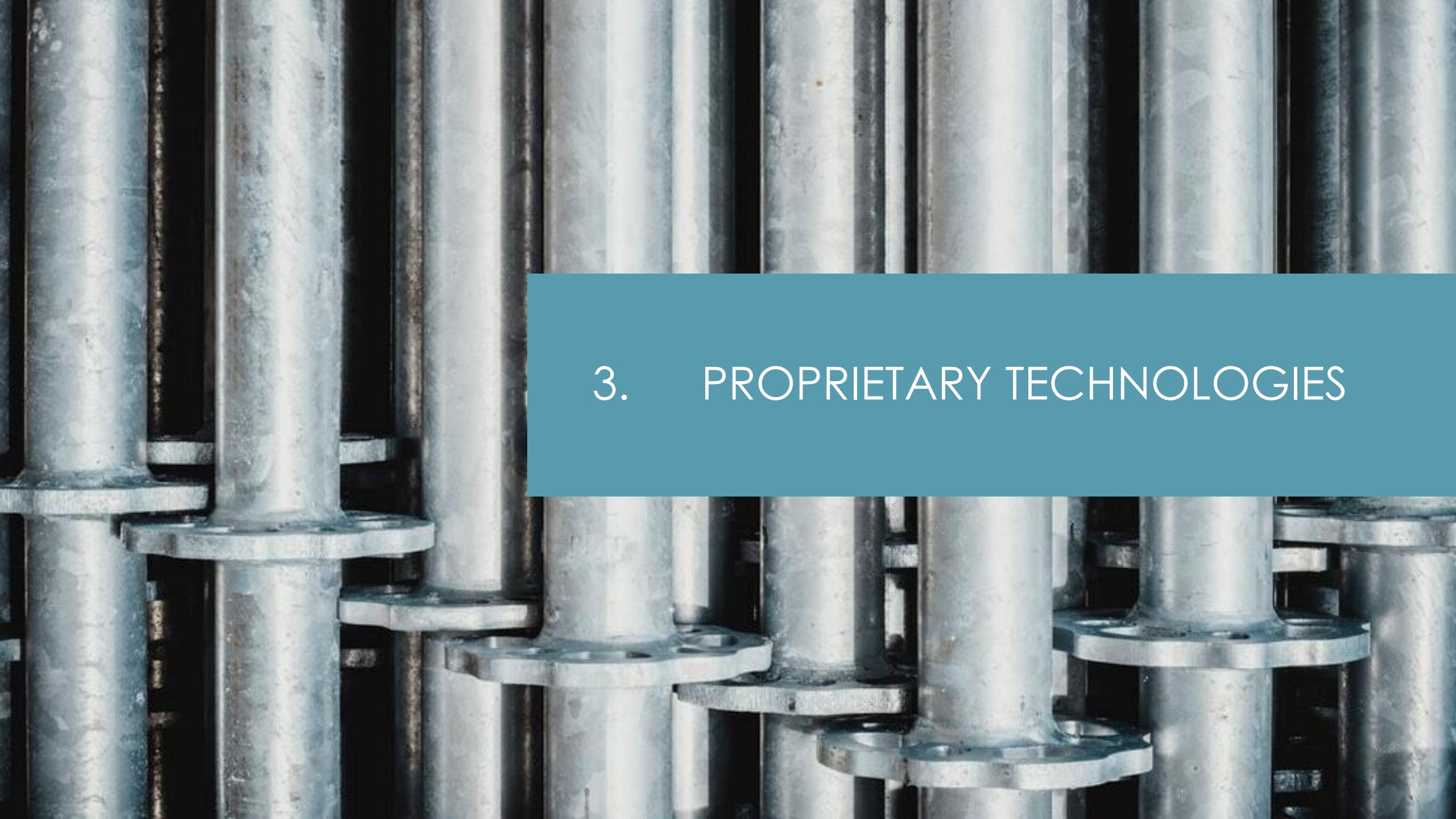
ANANKÉ can rely on a wide and solid network dedicated to energy efficiency in France

Strategic partners



Financing partners

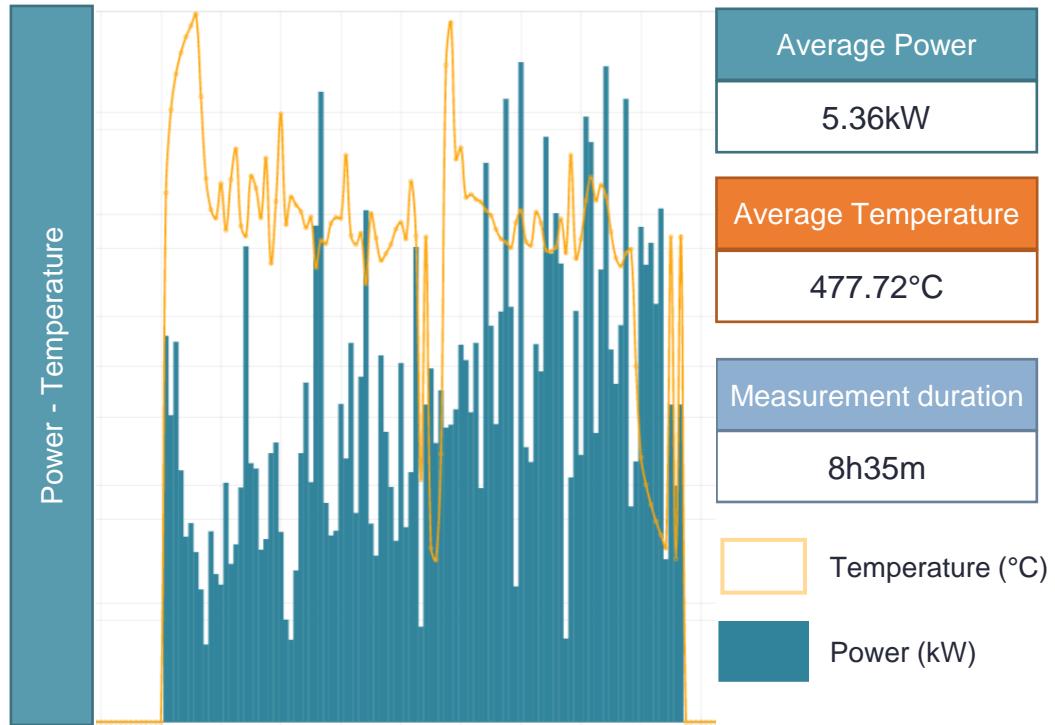




3. PROPRIETARY TECHNOLOGIES

ETNA: the Connected Waste Heat Diagnostic Tool

ETNA's outputs help draft a feasibility study to determine the best solution to recover waste heat

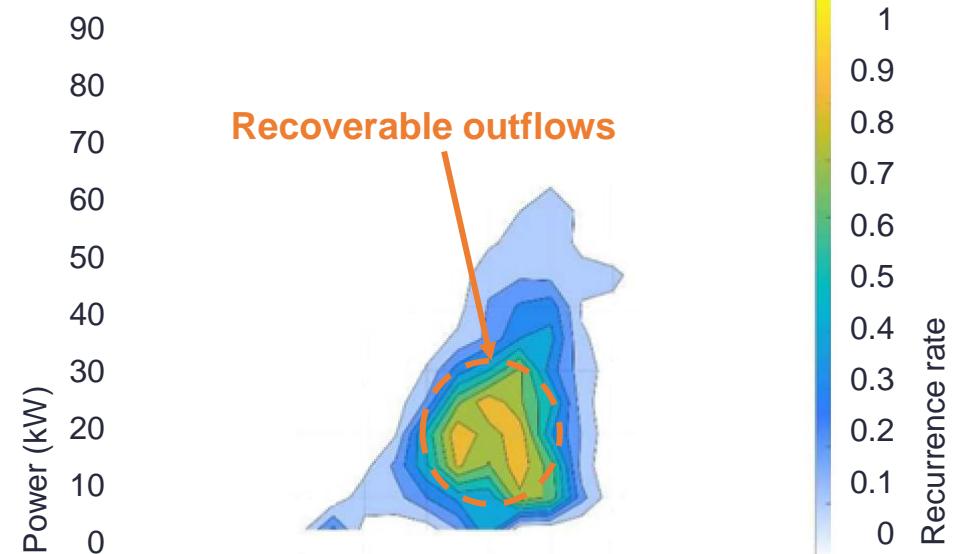


Real-time data monitoring throughout the measurement process



Eligible for financial support as part of an energy audit or energy efficiency project

- Fumes temperature measurement
- Estimation of recoverable power
- Fumes flow rate determination
- Fumes speed analysis
- Fumes composition analysis



KEOS and IONEX: Differentiating Cogeneration Technologies

Two modules of cogeneration developed for industry

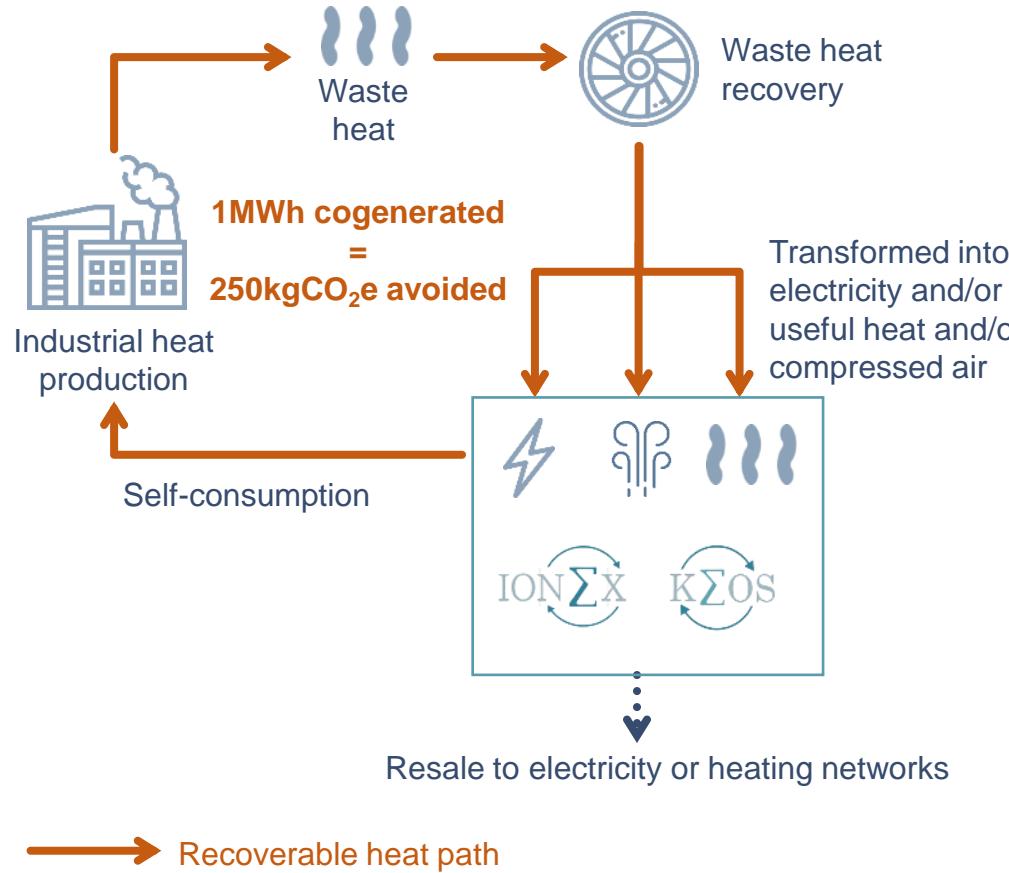


Technology	<ul style="list-style-type: none"> Heat to {heat + compressed air} 	<ul style="list-style-type: none"> Heat to {heat + power}
Engine	<ul style="list-style-type: none"> External combustion (Ericsson type) 	
Development status	<ul style="list-style-type: none"> R&D & pre-industrialization completed Entering industrialization phase 	<ul style="list-style-type: none"> Under development Expected industrialization by 2025
TRL	<ul style="list-style-type: none"> 7 	<ul style="list-style-type: none"> 5
Power	<ul style="list-style-type: none"> Current: 40kW (electrical equivalent) & 200kW (thermal equivalent) to recover 300kW of waste heat Future: 120kW (electrical equivalent) & other power depending on needs 	
Efficiency	<ul style="list-style-type: none"> 80%: heat & compressed air production 13.5%: compressed air production only 	
Selling price	<ul style="list-style-type: none"> € 295K¹ 	<ul style="list-style-type: none"> € 320K¹
Lifespan	<ul style="list-style-type: none"> 20 years 	

(1) Price before subsidies to which manufacturers are eligible for the installation of such equipment (target min. 30% of total cost)

Value Creation Process in Cogeneration

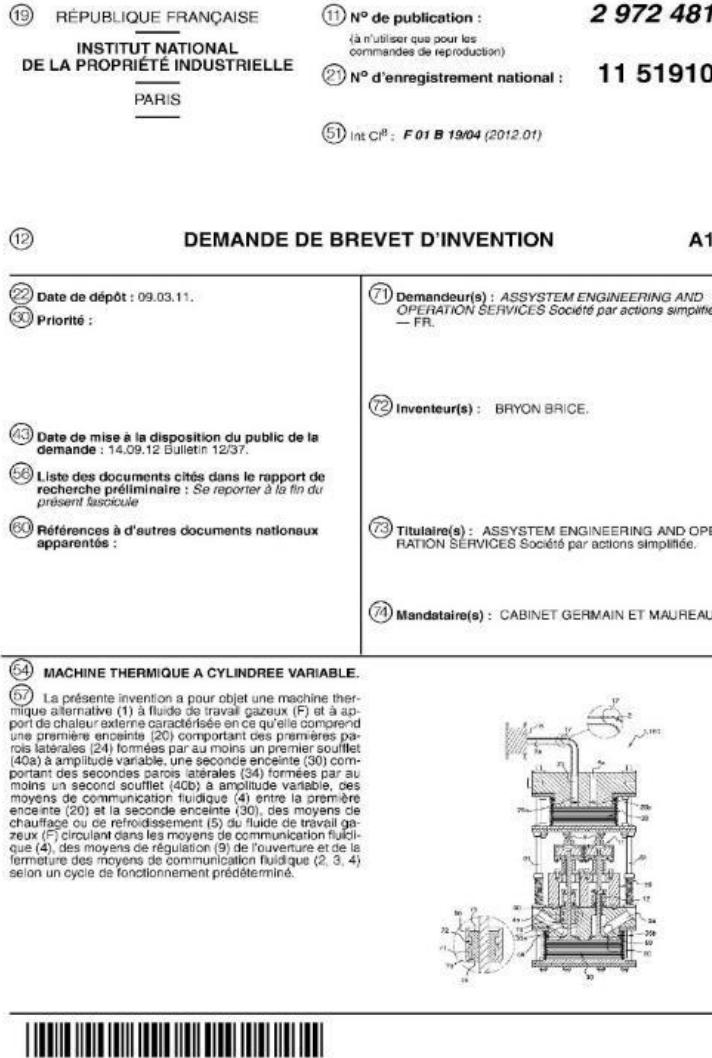
KEOS and IONEX can meet different needs by converting waste heat into electricity, compressed air and heat



- ✓ Self-consumption of energy cogenerated
- ✓ Reduction of exposure to energy price volatility
- ✓ Reduction of greenhouse gases emissions and purchase of carbon quotas

Intellectual Property

Patents and trademarks to protect ANANKÉ's IP



Patents

- 1 patent on Ericsson's engine developed by the founders during their time at ASSYSTEM (patent now transferred to ANANKÉ)
- 1 patent application filed to protect the engine's distribution system (at the heart of the technology's innovation)
- 3 main patents (mother patents) currently being drafted, 5 additional patents (daughter patents) (protection of sub-assemblies using the mother patents) planned for 2024

Trademarks

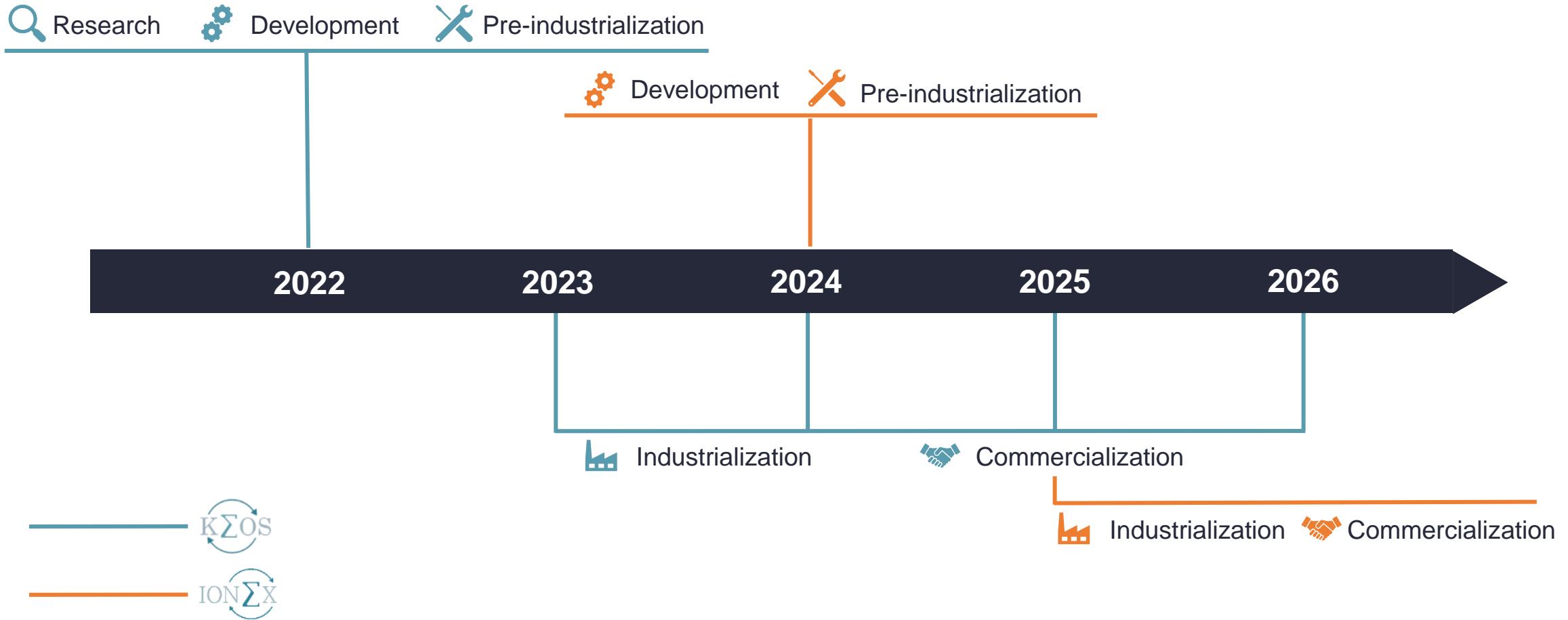
- Domain names protected
- ANANKÉ's brand and logo registered with INPI

Other

- Trade secrets on developments that cannot be protected by patents
- Advised by Santarelli, an advisory company specialized in industrial property's protection

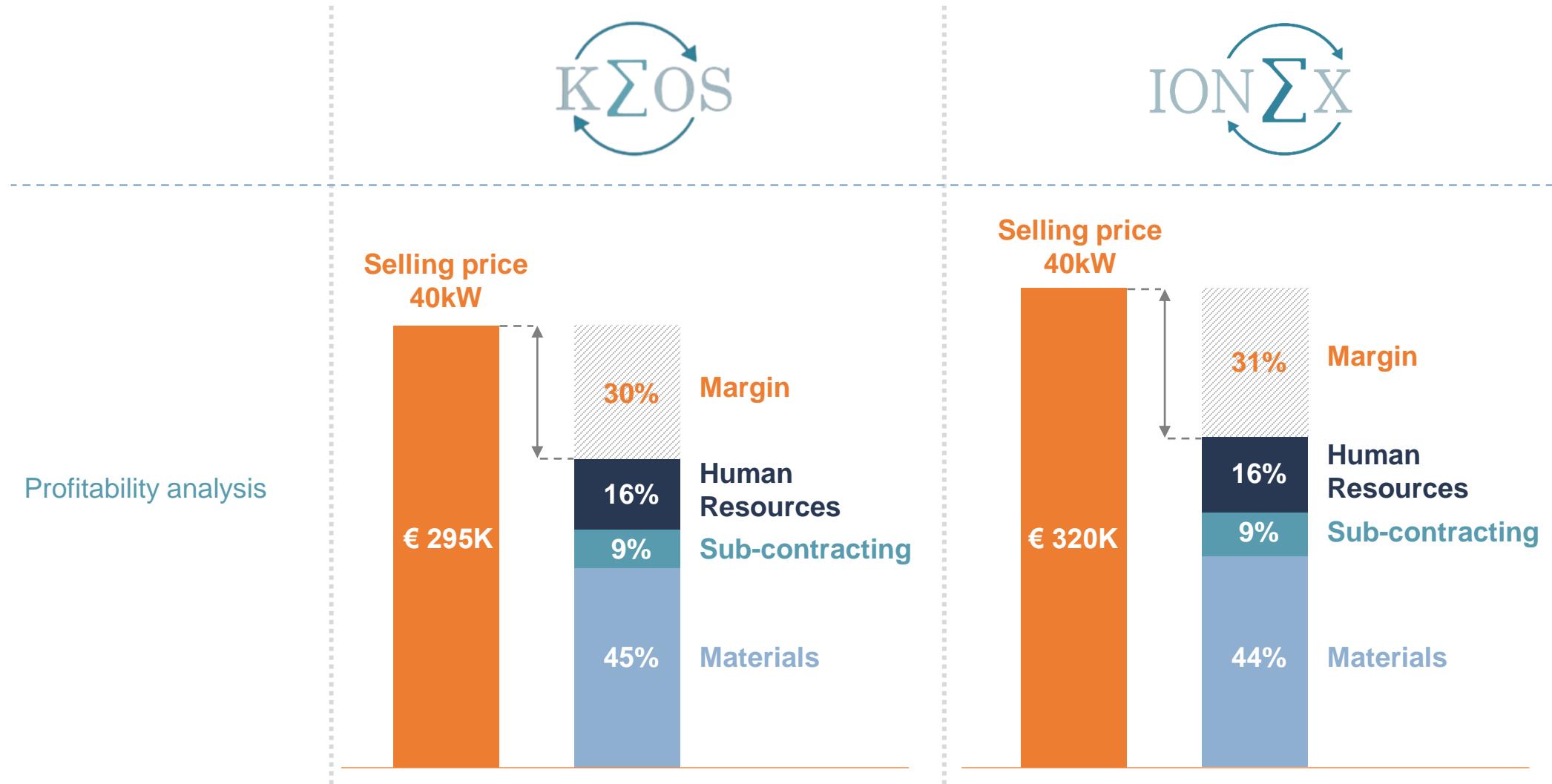
Development Plan

Industrialization for KEOS is ready to start, while it should start by 2025 for IONEX



Unit Analysis

Ca. 30% margin on average for each sale of a 40kW KEOS / IONEX module



Business Case – Example of KEOS

Enabling annual energy savings of up to € 230K and more than 500tCO₂ per year for a client

Client profile	Small scale industrial plant with ¹ : <ul style="list-style-type: none"> • Heat needs: ~1,600 MWh/y • Electricity needs: ~320 MWh/y
Business model	Equipment sale
Capacity installed	40kW
Heat recovery performance	80% (13.5% compressed air produced + 66.5% thermal power produced)
Heat savings	€ 142K/y
Power savings	€ 48K/y
Carbon savings	€ 40K/y ²
CO₂ emissions avoided	505tCO ₂ /y ³
Payback	[2.6-1.8] years ⁴ for [0-30]% subsidy



(1) Target: industrial clients with annual power consumption < 70GWh

(2) € 80/tCO₂ assumed

(3) 0.227 tCO₂/MWh avoided for gas and 0.317 tCO₂/MWh avoided for power assumed

(4) Considering purchase price of € 295K + installation price of € 200K + O&M price of € 29.5K/y + 8,000 hours/y rate of use

First Turnkey Installation Presentation

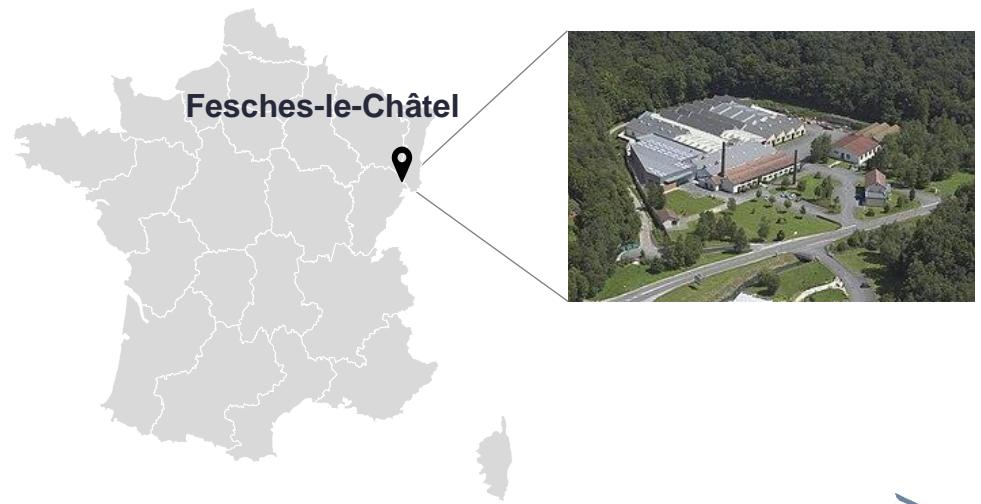
First KEOS successfully installed for Cristel on their industrial site in the East of France

Key information

Client	• Cristel: French manufacturer of high-end stainless steel cookware
Location	• Fesches-le-Châtel (Doubs, France)
Status	• Operational since March 2022
Technology	• KEOS (heat to compressed air)
Selling price	• € 100K including 30% of public subsidies
Performances	<ul style="list-style-type: none"> • Capacity: 10kW • Est. compressed air production: 400 kWh/y
Impact	<ul style="list-style-type: none"> • Compressed air production saving up to 10% of the site's consumption (annual energy consumption of 13 houses)

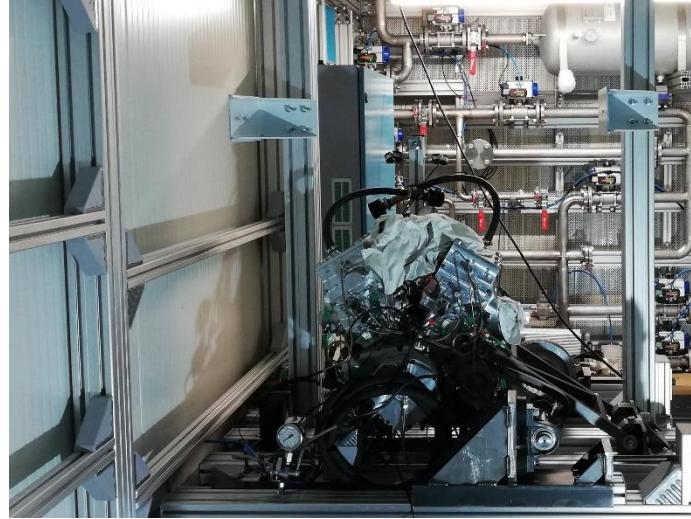


Location



First Project

Pictures



ANANKÉ in the News

The CleanTech catches the eye of renowned newspapers



Les Echos

Ananké valorise la chaleur fatale avec son module de cogénération



Source: [Les Echos](#), 29/04/2021

L'USINE NOUVELLE

En vedette START UP | BRICAOIR ENERGETIQUE | DOUBS
La pépite Ananké va valoriser la chaleur fatale chez Cristel



Source: [L'Usine Nouvelle](#), 10/03/2023



INTERVIEW

Valoriser la chaleur fatale dans l'industrie grâce à un moteur à apport de chaleur externe

Source: [Techniques de l'Ingénieur](#), 21/12/2021



Les Echos

Les casseroles Cristel testent un module de cogénération pour produire plus propre ☀️



Source: [Les Echos](#), 12/09/2022

TV News Report on the first project



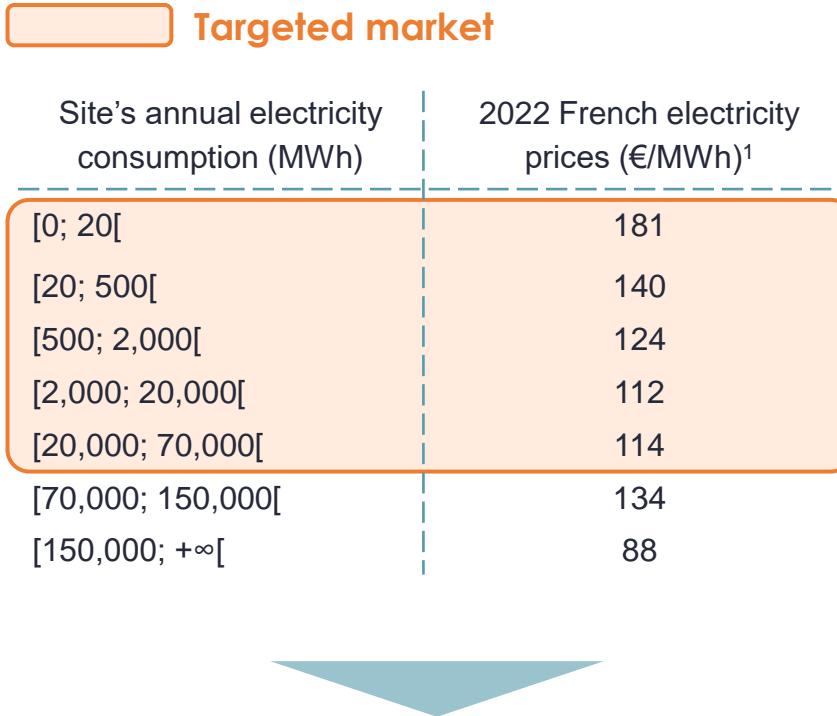
A photograph of an industrial complex, likely a refinery or chemical plant, set against a backdrop of a bright blue sky with scattered white clouds. In the foreground, several large, cylindrical metal structures, possibly storage tanks or heat exchangers, are visible. A tall, thin metal lattice tower stands on the left side. Two prominent tall cylindrical towers rise from the center of the facility. The overall scene is industrial and suggests a heavy industry environment.

4. COMPETITIVE EDGE

Strategic Positioning

Target of small-scale industrial facilities, with relatively low power needs

Target of strong energy price pressure ...

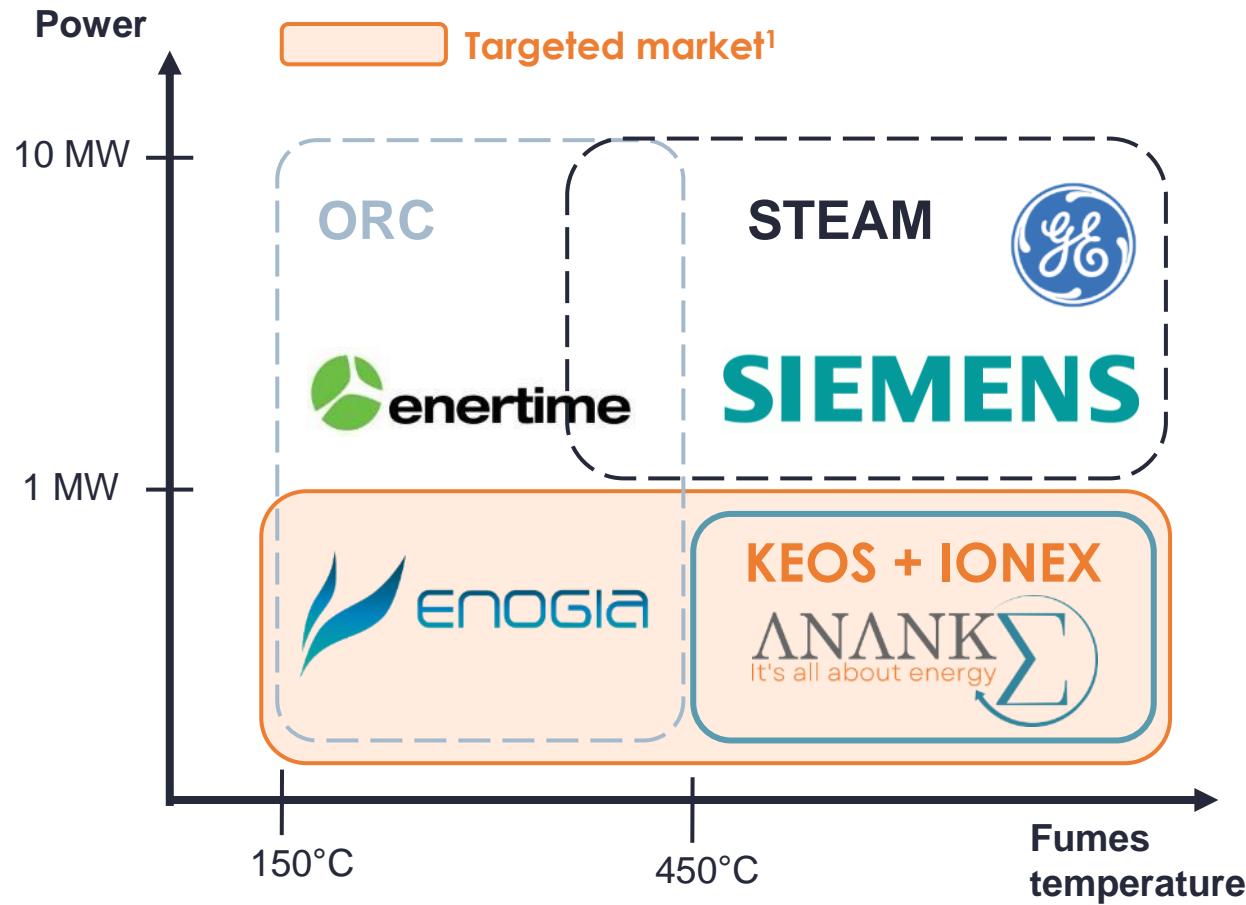


- Self-consumption is more advantageous for small industrial sites because of strong exposure to energy prices volatility

(1) Source: Eurostat

CONFIDENTIAL

... and low power needs in terms of MW



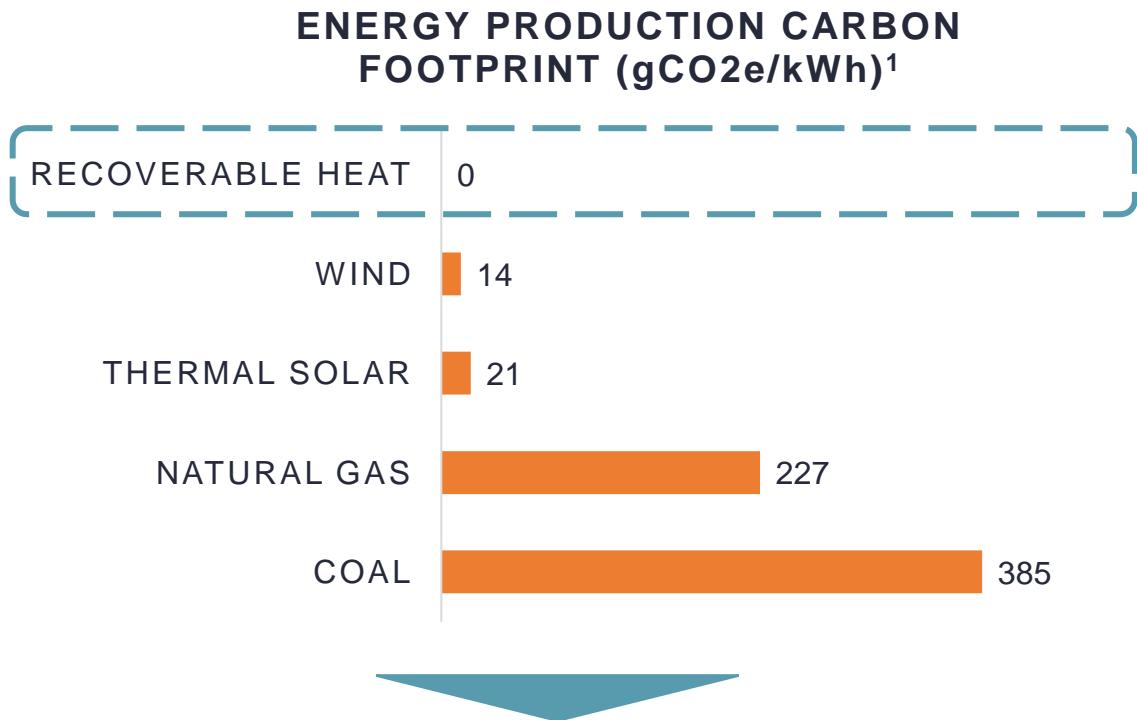
(1) Including installation of non-proprietary solutions

36

Competitive Advantages

A unique decarbonated way to efficiently cogenerate energy in industry

The least carbon-intensive energy production method



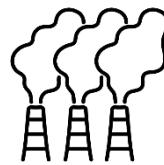
- Recovered heat recorded at **0 gCO₂e/kWh**, as it is considered by the FEDENE to be lost as waste heat if not recovered

(1) Source: FEDENE

Other differentiating features of ANANKÉ's engine



Standardized Ericsson engine unit **reducing production costs**



Suitable to **recover fumes** of higher temperatures than competitors on average



High **performance ratio**



Adapted to **discontinued heating processes** without altering components

A photograph of an industrial building's exterior. On the left, there's a complex system of stainless steel pipes and a tall, vertical copper-colored chimney. The building itself has dark grey corrugated metal siding. A blue rectangular overlay covers the right side of the image, containing the text.

5. GO-TO-MARKET STRATEGY

Geographical Expansion Strategy

Progressive geographical development, starting with France as a priority market

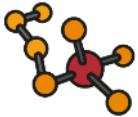
			
Geographical coverage	France	Europe	Global
Timing	Immediate	In 3 years from now	In 5 years from now
Strategy	<ul style="list-style-type: none">4 regions concentrating ca. 70% of national potential (Hauts-de-France, Grand-Est, Provence Alpes Côte d'Azur, Auvergne-Rhône-Alpes)	<ul style="list-style-type: none">Targeted countries: England, Germany, Italy, i.e., European countries with highest energy prices	<ul style="list-style-type: none">Priority focus on companies with international presence, with modules already installed in plants in FranceTargeted countries: Mexico and Brazil

Targeted Clients

Strategy to focus on energy-intensive activities, confirmed by first interests already received from industrials

Targeted industry sectors

Targeted Industrial Market Segments



ARKEMA **TOTAL**



SAINT-GOBAIN **Holcim**
LAFARGE



verallia **ArdaghGlass**



ArcelorMittal **thyssenkrupp**

Strong interest expressed by major industry stakeholders

aperam

A Isbergues, le 25 mars 2019

Monsieur CARTIGNY,

Spin-off du groupe ArcelorMittal, Aperam jouit d'une forte empreinte européenne (Belgique, Hongrie, Pologne...) et internationale (Brésil, Inde, Afrique...) dans la production d'acières inoxydables, d'acières électriques et autres alliages à haute-valeur ajoutée.

Conduire l'avenir avec l'innovation durable est inscrit dans l'ADN d'Aperam tant dans sa démarche au quotidien basée sur une production essentiellement liée au recyclage des ferrailles, que dans l'intégration il y a quelques années de cela d'une unité de recyclage des poussières d'aciéries unique en Europe, RECYCO, afin d'en valoriser autant que possible les éléments d'alliages. Eau, recyclage des déchets, énergie sont autant de paramètres pris en compte au plus tôt dans nos procédés industriels avec pour souhait direct de diminuer notre empreinte environnementale globale.

Grâce à son moteur à apport de chaleur externe, Anank se positionne comme un acteur innovant et stratégique de la transition énergétique. La technologie développée par la start-up et saluée par le Grand Prix National de l'Ingénierie en 2015, bénéficie de nombreux soutiens : Ademe, Bpi France, Réseau Entreprendre, Aire Urbaine Investissement... Les modules Anank valorisent la chaleur fatale et permettent un haut rendement énergétique et un retour sur investissement rapide.

C'est au regard de cette technologie à forte valeur ajoutée et de la démarche dans laquelle elle s'inscrit, qu'Aperam a fait part de son intérêt à Anank qui œuvre à son niveau pour la revalorisation des déchets. Cette réflexion s'est concrétisée par une collaboration en consortium début 2019 autour d'un projet européen commun. Ce dernier, si accepté, pourra conduire à la commercialisation de 50 modules Anank de 100 kWc d'ici 3 à 5 ans. Une intégration à plus grande échelle pourrait être envisageable par la suite.

Dans l'attente d'une collaboration fructueuse, nous vous adressons, Monsieur, nos salutations distinguées.

Jean-Michel Damasse
Directeur du Centre de Recherche d'Aperam Isbergues

aperam
Aperam Isbergues
Centre de Recherche
Boîte Postale 15
F-62330 Isbergues France

Mini Green Power
L'énergie de demain

ERASTEEL

GROUPE POCHET
L'EXCELLENCE EN HERITAGE

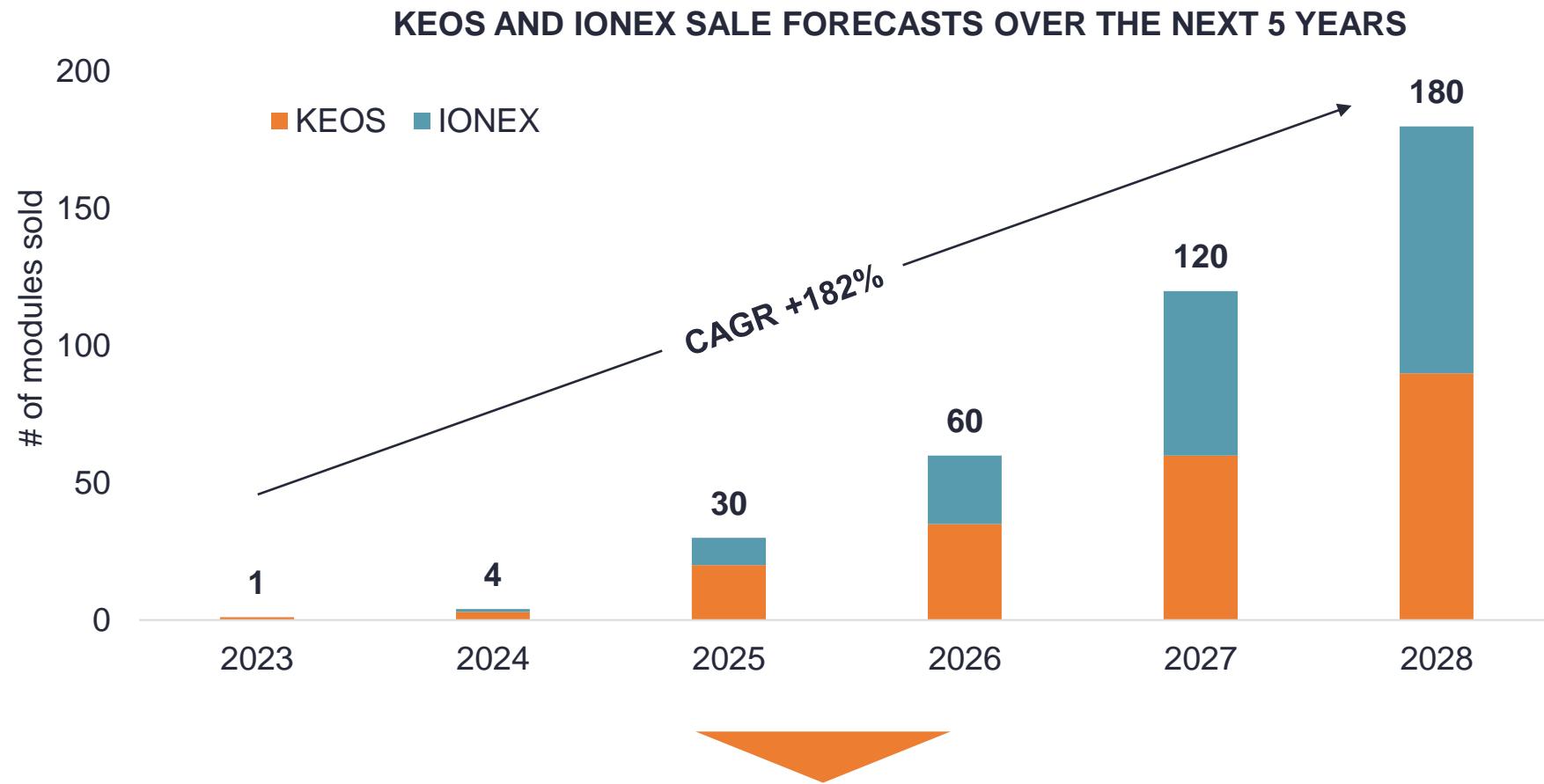
Safe Metal

ge

ATI
INDUSTRIES

Proprietary Technology Sale Forecasts

ANANKÉ targets to reach an equivalent of ca. 20% of the French market by 2028



Total ca. 400 KEOS / IONEX modules to be sold in the next 5 years, on top of which [3rd-party equipment](#) to also be installed

Solid Backlog Backing Sales Forecasts

Market traction is well established, with ca. € 700K orders at an advanced stage of negotiation for 2023

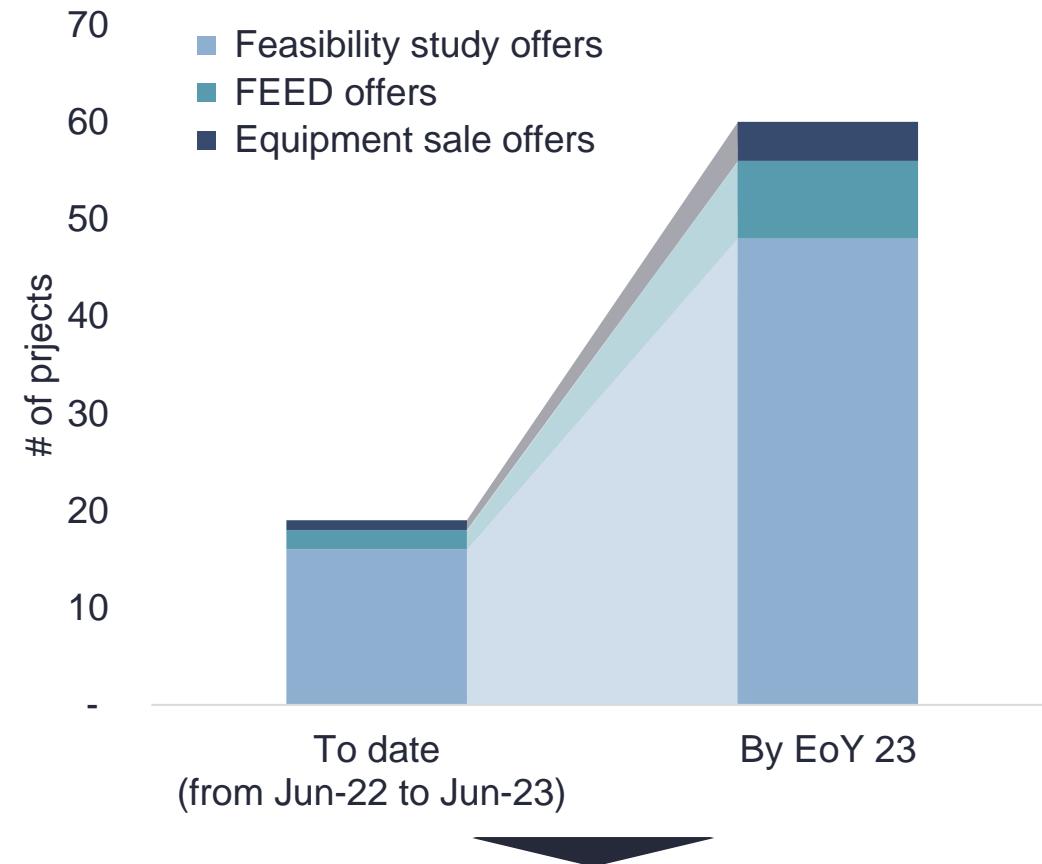
Backlog¹ as of today (in amount)



Ca. € 700K orders with high probability of success for 2023

(1) Backlog including feasibility studies, FEED and equipment sale

Projections of offers sent by the end of 2023 (in volume)



Strong acceleration of commercial effort in 2023, with offers x3 by the end of the year

A photograph showing a group of diverse hands reaching upwards towards the sky. The hands belong to people of different skin tones, including white, brown, and dark skin. The background is bright and out of focus, suggesting a sunny outdoor environment.

6. TEAM AND BOARD

Four Founders

A shared experience at ASSYSTEM has forged a close-knit team with complementary skills

**Brice BRYON**

President

Graduated from IPSA (FRA) in aeronautics and space, Brice has worked for ASSYSTEM until 2015 as a Mechanical Engineer first and as a Business Unit Manager and Innovation Manager.

His experience as Director of Engineering and Innovation at FIVES CINETIC gave him core skills needed for the position of President of ANANKÉ.

**Thibaut CARTIGNY**

CEO

Graduated from Polytech Nancy (FRA), Thibaut has worked for GENERAL ELECTRIC as a Business Manager, Quality Engineer and Technical Coordinator.

Before launching ANANKÉ, he was in charge of the R&D and managing an engineering team of 80 people at ASSYSTEM.

**Mathieu DOUBS**

Innovation Expert

With a master's degree in thermal and energy engineering from University of Bourgogne-Franche-Comté (FRA), Mathieu is doing a PhD about Ericsson's engine at ANANKÉ.

He started his career as R&D engineer at ASSYSTEM before the creation ANANKÉ.

**Pierre RANC**

Technical Director

After a master's degree in thermal and energy engineering at University of Bourgogne-Franche-Comté (FRA), Pierre obtained a PhD in energy, while working at ASSYSTEM.

His expertise encompasses machines with adjustable external heat input, compressible fluid mechanics and heat transfer.

Advisory Committee Members

ANANKÉ also benefits from the support of an advisory and strategic committee of energy experts



Patrice SELOSSE

Patrice has built his career as a project manager at EDF and RTE.

He is currently vice president of both PM Initiatives, a startup accelerator, and IESF, an association gathering engineers across France. He is also quite active in the CNAM Club Investment



Edouard BOURGEOIS

Graduated from ESCP Europe, Edouard's background relies on a strong financial experience.

His current position is manager at Portzamparc - BNP Paribas Group – where he is also a member of the investment committee in charge of financial companies.



Jean-Luc HABERMACHER

Jean-Luc stands as a very active key player in industry in Belfort, and more especially in energy: he has been working for General Electric as Risk Manager for many years and has been president of the *Vallée de l'Énergie*, a gathering of industries specialized in energy.

His solid experience and strong interest for new technologies and energy transition make him valuable for the development of ANANKÉ.



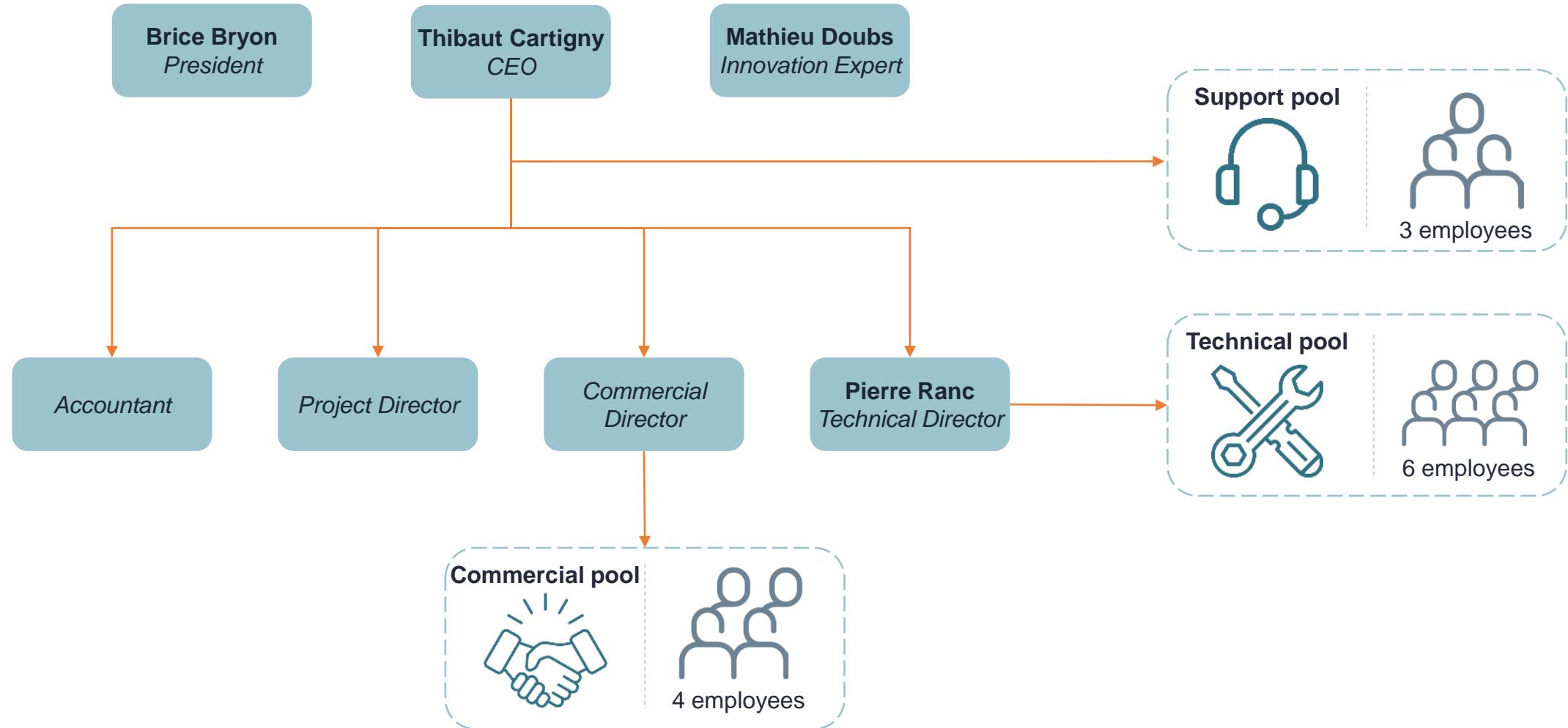
Pierre FRANÇOIS

As a member of the CNAM Club Investment, Pierre has been in touch with ANANKÉ and then has decided to dedicate time into it and also to invest in the startup.

Pierre has graduated from Icam Engineering School and obtained a PhD in electronic, electrotechnics and automation.

Team in Place

20 experienced professionals mostly centered around R&D, innovation and commercial positions



A close-up photograph of a person's hands holding a small green plant with delicate leaves in a handful of dark brown soil. The hands are positioned in the center, with the fingers supporting the base of the plant. The background is a soft, out-of-focus green, suggesting a natural outdoor setting.

7. IMPACT

Impact

Major economic and environmental impacts expected, in line with current SDGs



ECONOMIC IMPACT

- Energy bill reduction
- Limitation of exposure to energy price volatility
- Integration of state-of-the-art innovations

SDG n°8: Decent work and economic growth

SDG n°9: Industry, Innovation, Infrastructure

SDG n°12: Responsible consumption & production



ENVIRONMENTAL IMPACT

- Decrease in carbon-based energy consumption
- Carbon footprint reduction
- Production of zero-carbon energy

SDG n°7: Affordable & clean energy

SDG n°11: Sustainable cities & communities

SDG n°13: Climate action

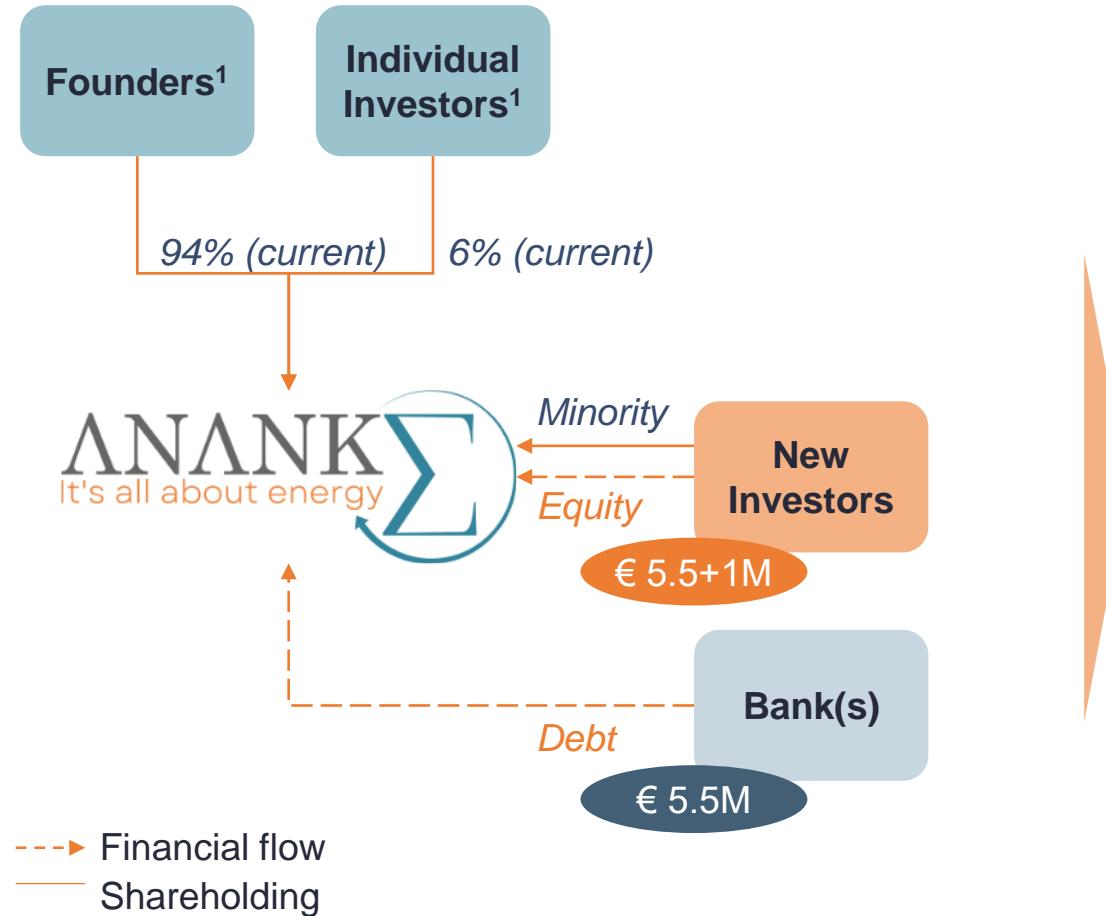




8. PROPOSED TRANSACTION

Targeted Transaction

Invest up to € 6.5M and get a significant minority stake in ANANKÉ

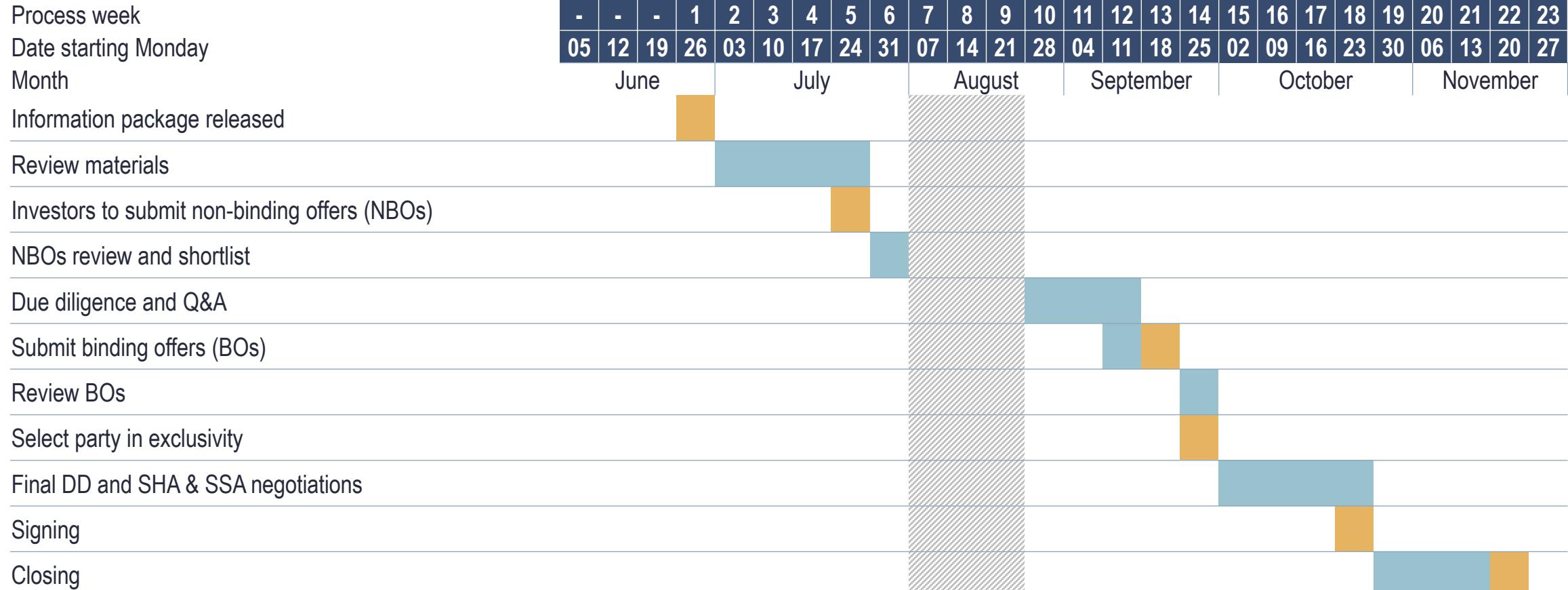


(1) See details in Appendix

- **Current capitalization table:** 14 individual shareholders, including the 4 founders who retain together 94% of the shares
- **Capital increase proposed:** € 6.5M equity raised with new investor(s) in exchange for a significant minority stake in ANANKÉ:
 - € 5.5M to pursue and complete R&D, and industrialize KEOS and IONEX production
 - € 1M asset financing (start of utility sale business model)

Transaction Anticipated Timeline

Effective process with closing of the Transaction occurring by Q4 2023



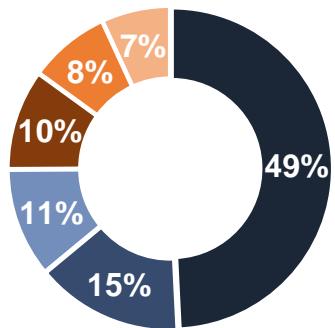


9. USE OF FUNDS

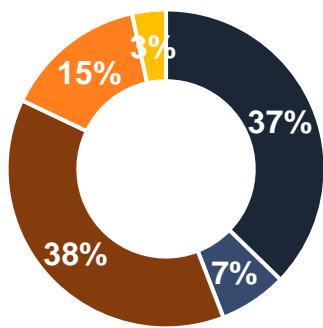
Use of Proceeds

Equity contribution up to € 6.5M to accelerate ANANKÉ's industrialization

Uses (€M)	Sources (€M)
Industrial investment	7.2
Marketing and sales effort	2.1
Small equipment	1.6
HR investment	1.5
R&D	1.1
Asset financing	1.0
Total	14.5
Sources (€M)	Uses (€M)
New equity	5.5
New equity/quasi-equity	1.0
New debt	5.5
Self-financing	2.0
New subsidies	0.5
Total	14.5



- Industrial
- Small equ.
- R&D
- Marketing and sales
- HR
- Asset



- New equity
- New equity/quasi-equity
- New debt
- Self-financing
- New subsidies

€ 14.5M funding needed over the next 3 years to reach commercialization phase for KEOS and IONEX

- € 10M to pursue R&D and industrialize KEOS and IONEX:
 - € 1.1M dedicated to R&D
 - € 1.6M for purchase of small equipment
 - € 7.2M for industrial investment (building rental, production lines, major equipment...)
- € 3.5M for structure costs:
 - € 1.5M dedicated to reinforcement of production team (engineers, technicians)
 - € 2.1M dedicated to recruitment of a solid commercial team and various marketing costs
- € 1M asset financing (ca. 3 KEOS modules), to initiate the utility sale model on ANANKÉ's balance sheet

Human Resources Plan to Achieve Ambition

A gradual recruitment: production positions gradually replacing R&D as the industrialization stages are validated

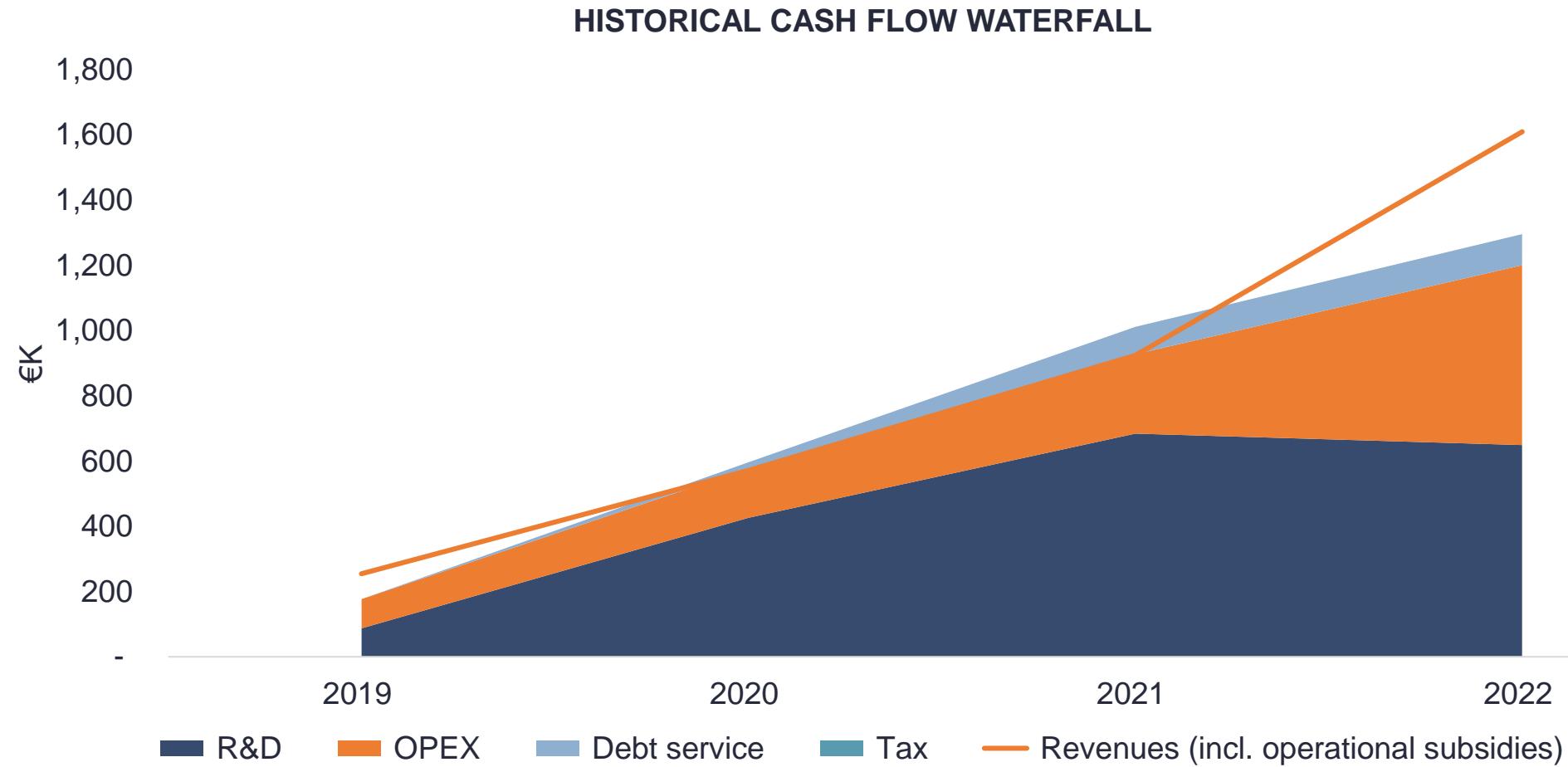


A blurred background image showing a person's hands and arms working at a wooden desk. A laptop is open on the left, displaying some text. To its right are several papers, a calculator, and two pens. The person is wearing a light-colored shirt and a patterned tie.

10. KEY FINANCIALS

Historical Financials

Efforts focused on R&D until 2021, progressively turning to production and sales



Funding to Date

ANANKÉ has been financed with a mix of private and public funding

YEAR	EQUITY	DEBT	GRANT
2018	€ 108K Capital from founders € 70K Capital increase		
2019		€ 15K Loan from AUI € 50K Loan from ARDEA Creation Emploi	€ 200K Grant from ADEME ECOGEN
2020	€ 40K Capital from Réseau Entreprendre	€ 200K Loan from ARDEA INVEST € 200K Loan from Bank € 176K Loan from PGE	
2021			€ 282K Grant from BPI
2022		€ 100K Loan from ADEME (ECOGEN)	€ 51K Grant from CNRS € 1,150K Grant from MAUGIS ¹
2023		€ 15K Loan from AUI € 150K Loan from ARDEA Creation Emploi € 69K Loan from ADEME (ETNA) € 282K Loan from Bank	€ 283K Grant from BPI € 61K Grant from CNRS € 200K Grant from TECH € 56K Grant from ADEME (ETNA)
TOTAL	€ 218K (6% of total funding)	€ 1,257K (34% of total funding)	€ 2,253K (60% of total funding)

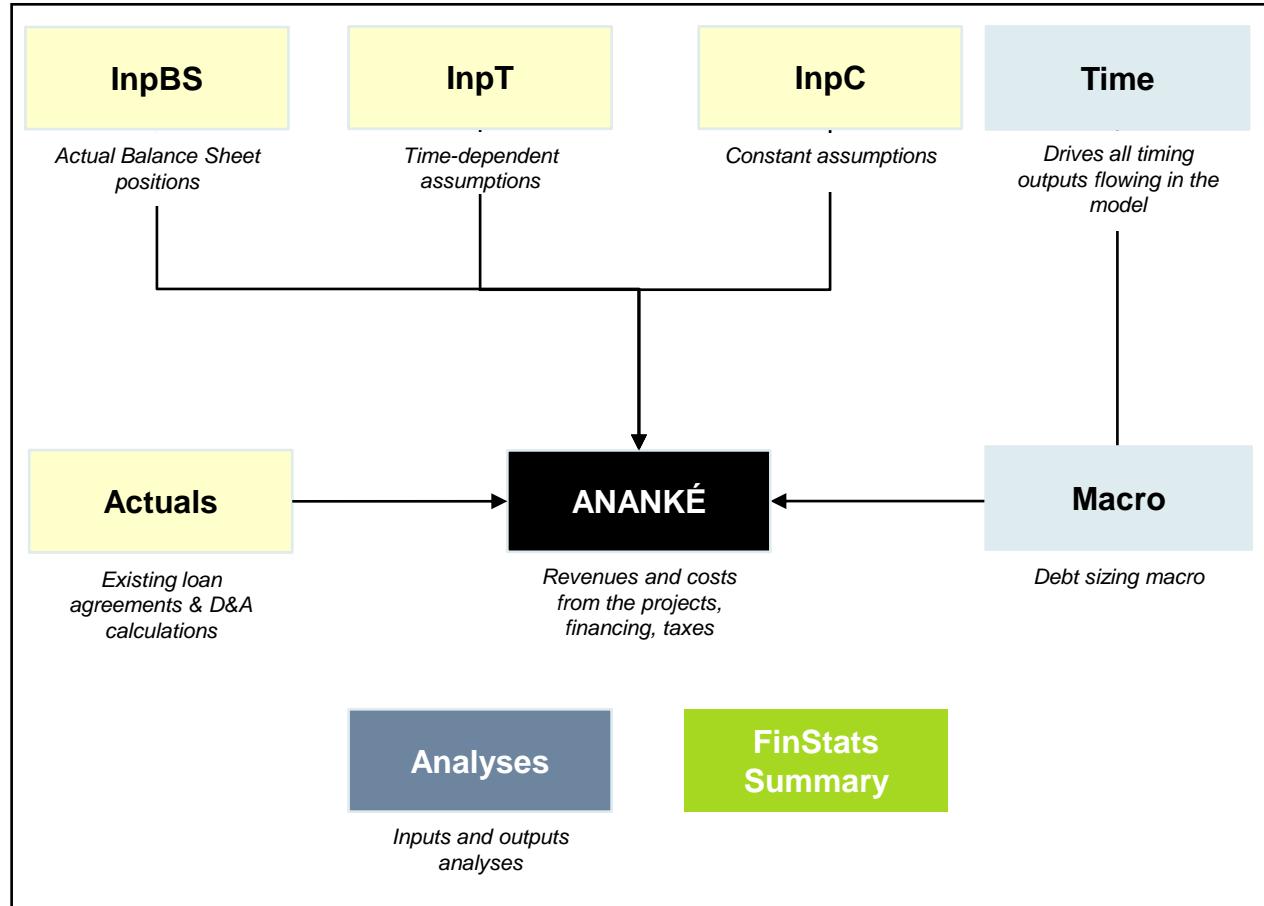
(1) Operating subsidy to finance team's expansion

Financial Model Structure

A vendor financial model provided to support investors in their Transaction analysis and Target valuation

Detailed financial model

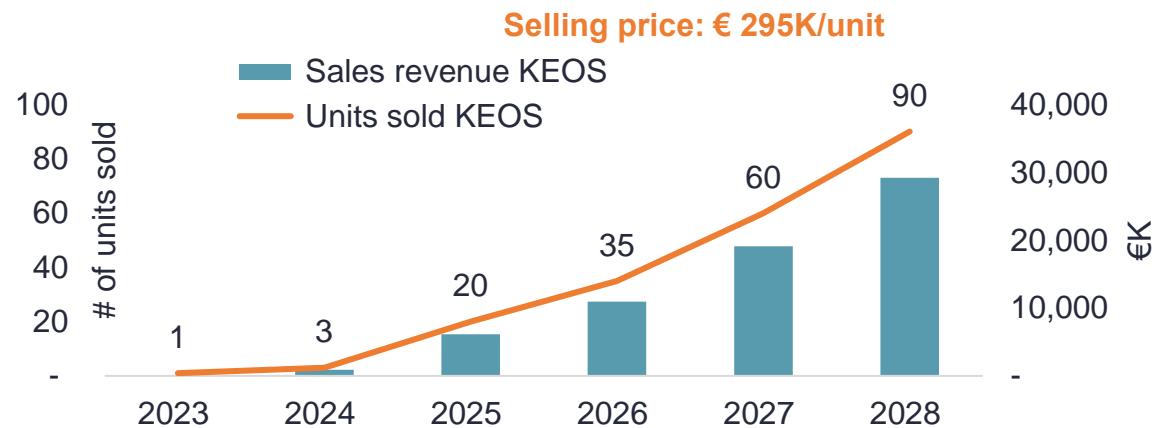
- Provided on a non-reliance basis to assist potential investors in their assessment of the Transaction
- Structured as illustrated in the figure on the right
- Actuals tab summarizing existing loans repayment and depreciation of existing assets
- ANANKÉ tab gathering revenue, operational costs, tax, assets depreciation calculations, and financing
- Further information can be found in the Financial Model itself, in the sheet 'Model Structure'



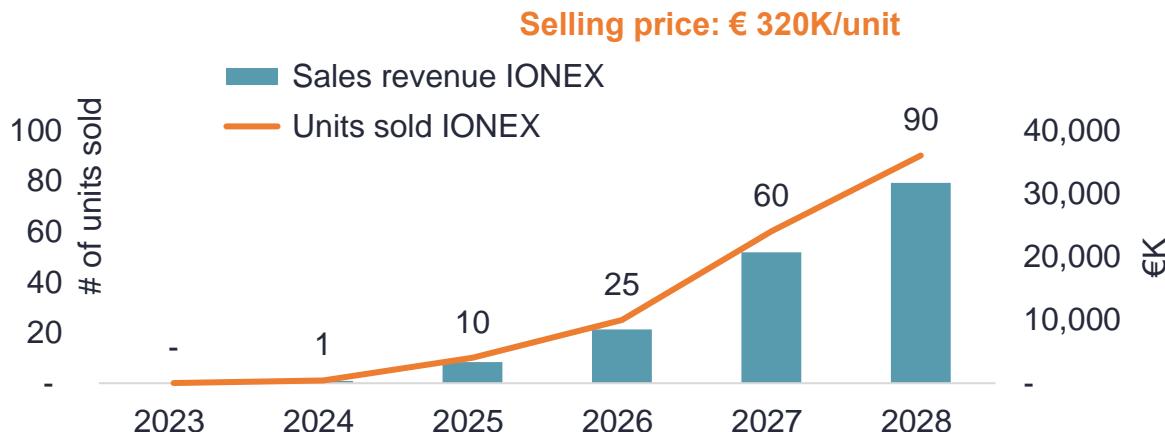
Financial Model – Key Inputs

395 units of KEOS and IONEX sold by end of 2028

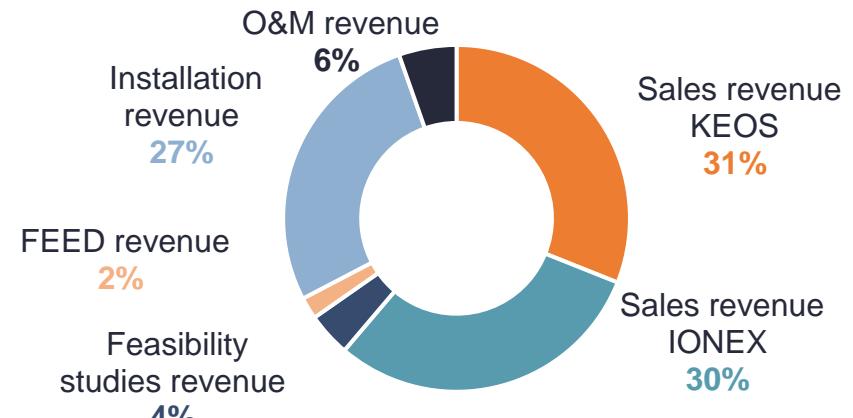
KEOS sales (units sold & revenue generated)



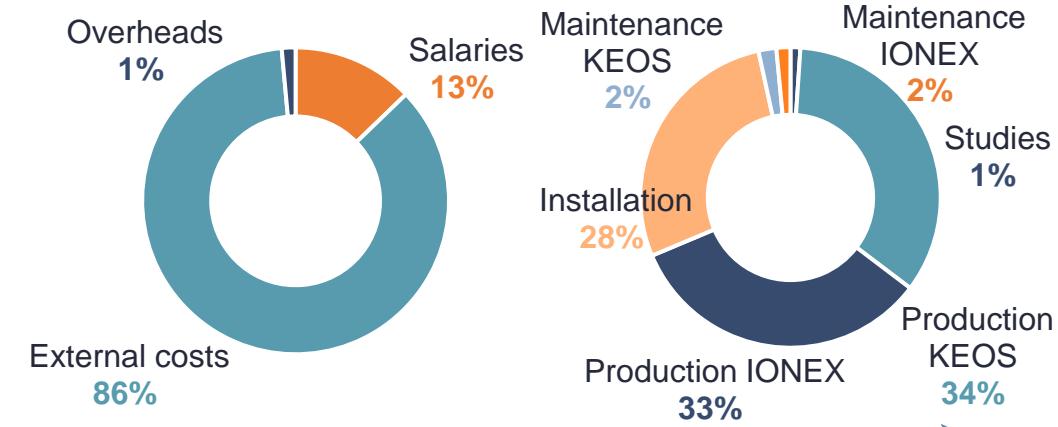
IONEX sales (units sold & revenue generated)



Revenue breakdown (avg. 2023-2028)



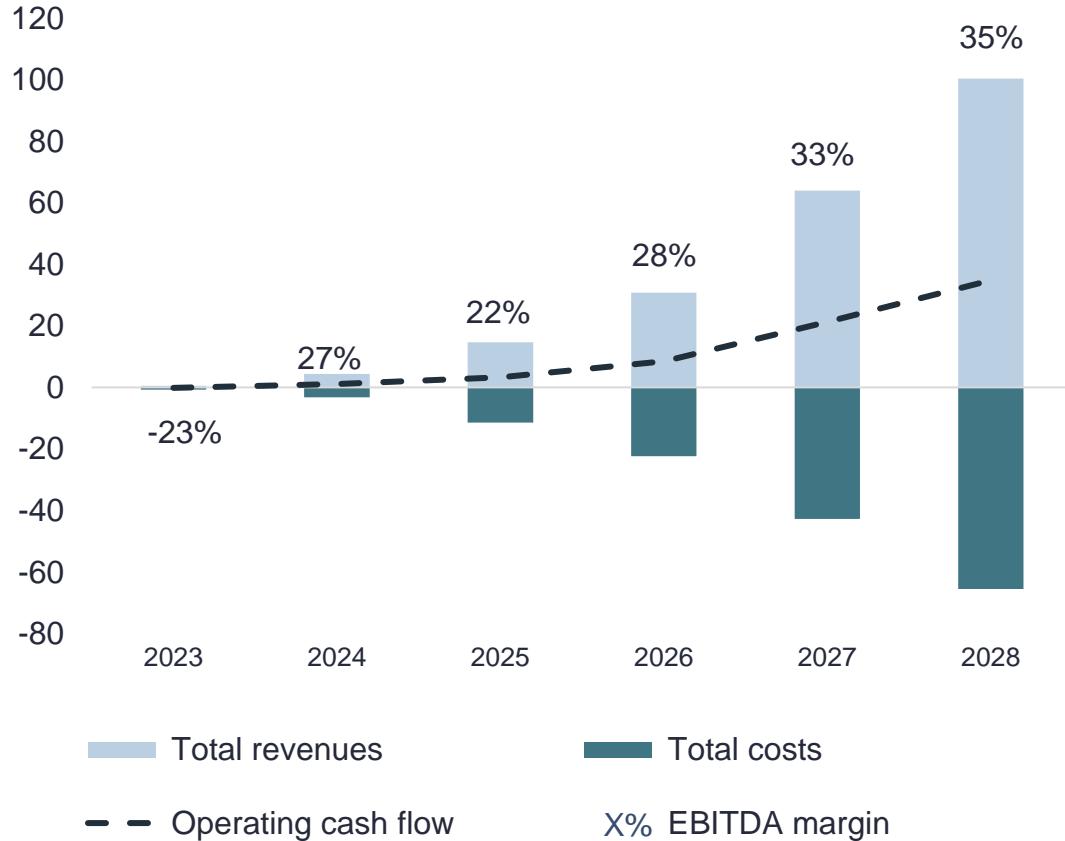
OPEX & external costs breakdown (avg. 2023-2028)



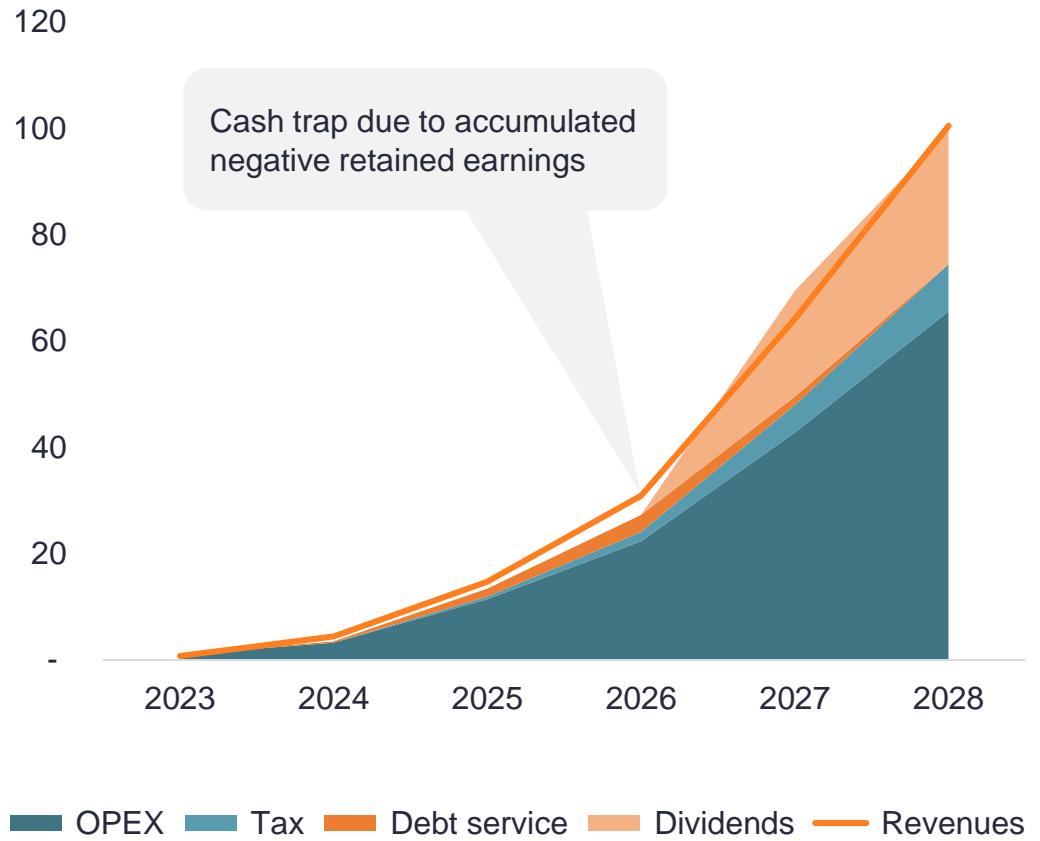
Financial Model – Key Outputs

A target EBITDA of ca. € 30M by end of 2028

Operating cash flow (€M)



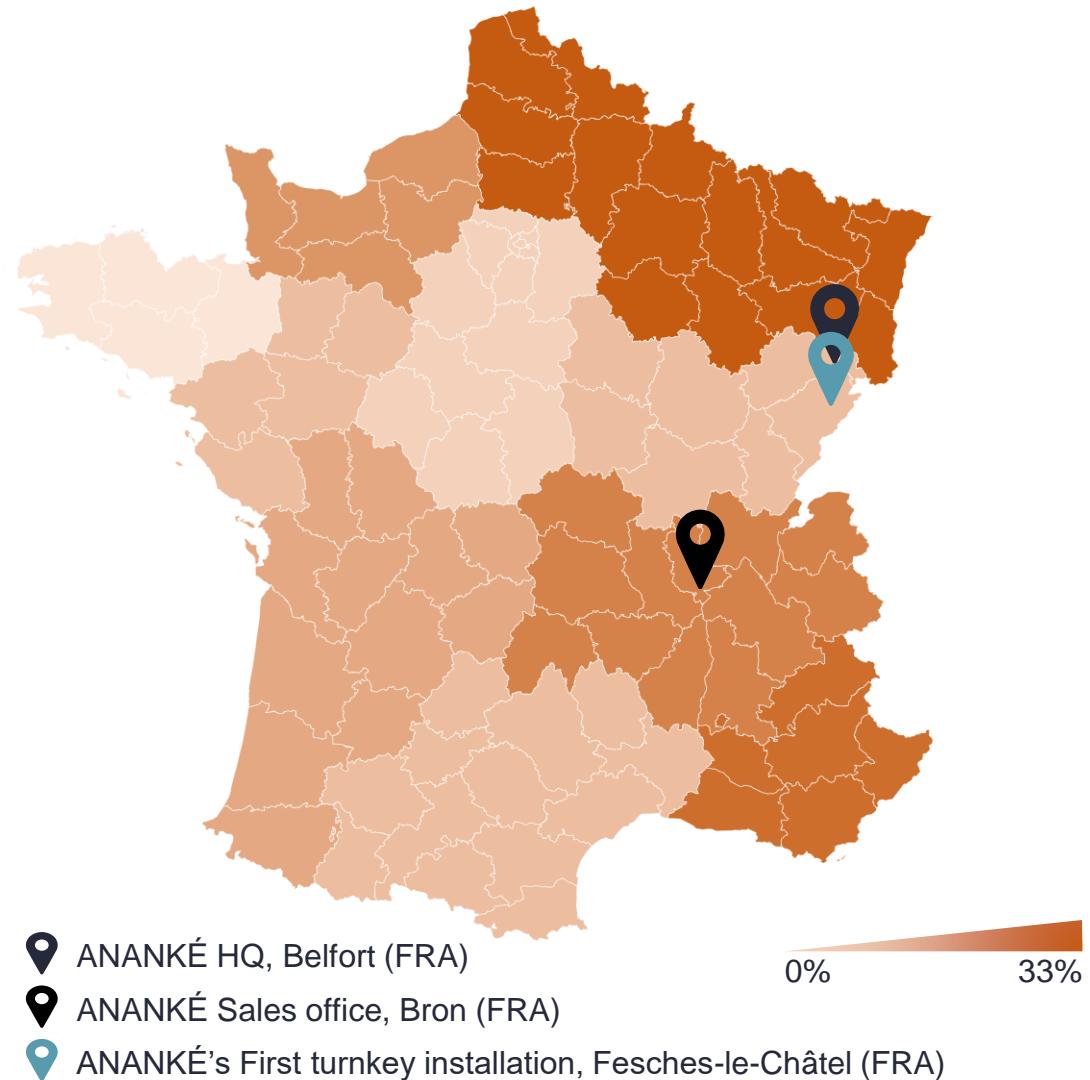
Cash flow waterfall (€M)





APPENDICES

Distribution of National Industrial Waste Heat in France



Four industrial regions account for over 69% of the national potential for the recovery of waste heat in industry:

- 📍 Hauts-de-France
- 📍 Grand Est
- 📍 Auvergne-Rhône-Alpes
- 📍 Provence-Alpes-Côte-d'Azur

Current Capitalization Table (1/2)

Founders and individual investors

Name	Shares	Key information
Brice Bryon	36.4%	Co-founder, President Technical Director at FIVES
Thibaut Cartigny	34.8%	Co-founder, CEO
Pierre Ranc	16.8%	Co-founder, Technical Director
Mathieu Doubs	6.4%	Co-founder, Innovation Expert
Patrice Selosse	1.2%	Advisory committee member Private investor (investment club member)
Pierre François	1.0%	Advisory committee member Private investor (investment club member)
Edouard Bourgeois	1.0%	Advisory committee member

Current Capitalization Table (2/2)

Additional individual investors

Name	Shares	Key information
📍 Dominique Cartigny	0.6%	📍 Family member of one of the founders
📍 Jean-Louis Vignolo	0.3%	📍 Director of Technology at Vallée de l'Energie
📍 Jean-Luc Habermacher	0.3%	📍 Advisory committee member
📍 Evelyne Bryon	0.3%	📍 Family member of one of the founders
📍 Michel Paulme	0.3%	📍 Private investor (investment club member)
📍 Arnaud Cartigny	0.3%	📍 Family member of one of the founders
📍 Aude Froehly	0.3%	📍 Family member of one of the founders



Process

The Target has mandated Echosys Advisory to act as exclusive financial advisor in relation to the Transaction. Any questions related to it should be directed to the below contacts.

Contact

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