GreenFusion

The AI-driven energy management platform to decarbonize the housing industry

Transforming residential buildings into auto-optimizing, CO2- neutral assets.

April 2025

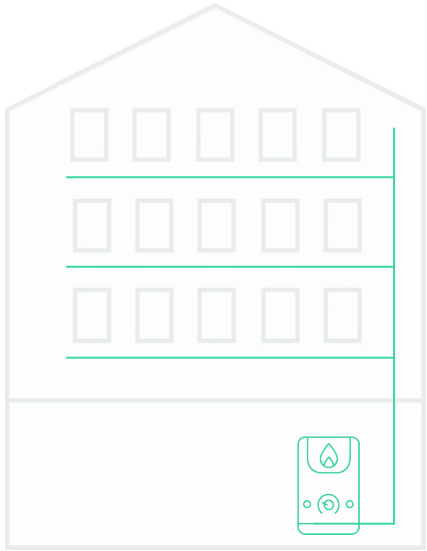
Building Europe's #1 energy operating system

64%

of heating systems
waste fuel & money

Today's heating systems are not optimized

- **Do not learn from past** user & system behaviour
- **Do not anticipate future** demand based on drivers, e.g. weather
- **Do not continuously optimize** in real-time using AI algorithms

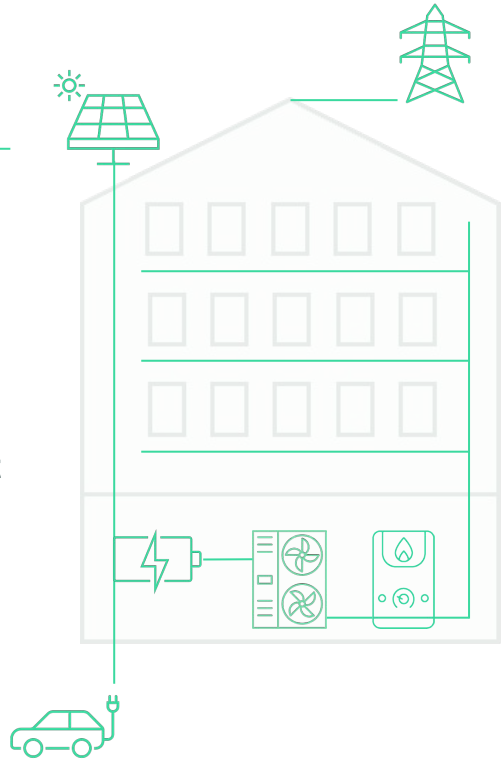


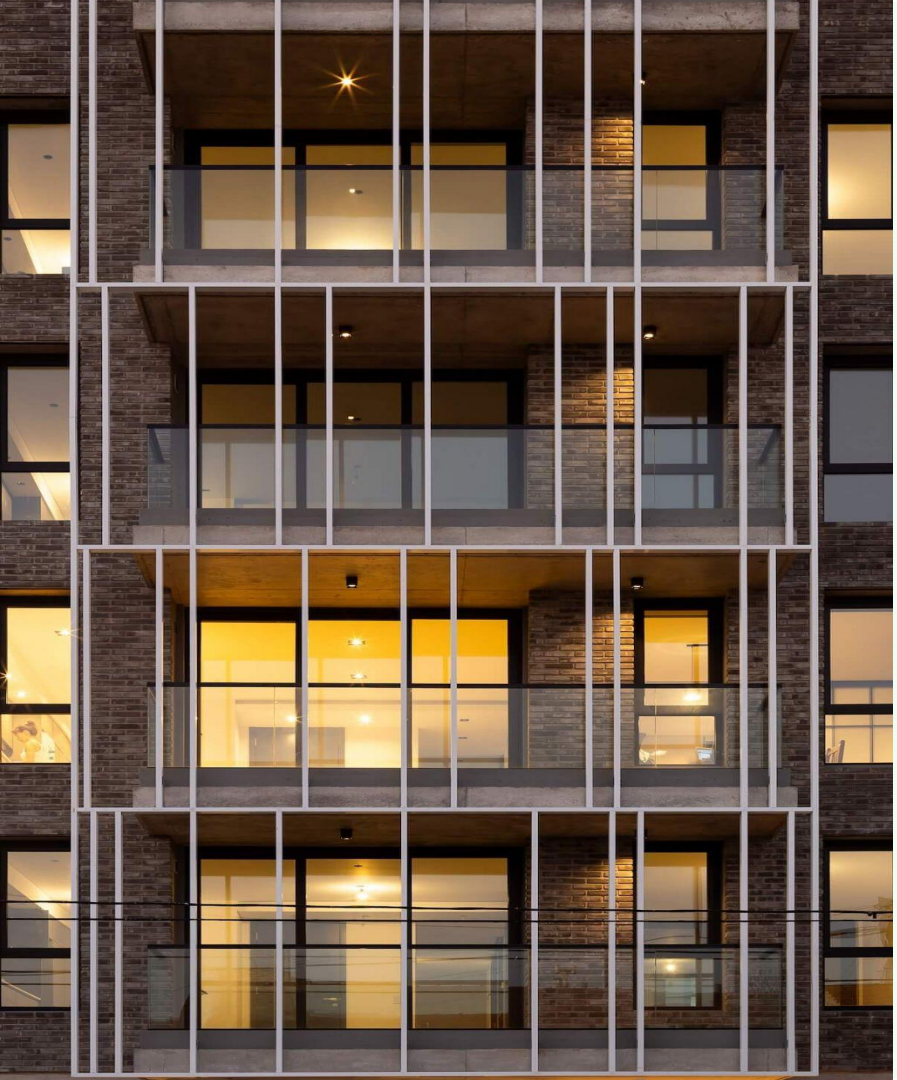
According to EU Energy Performance of Buildings Directive

THE FUTURE

Increasing system complexity brings opportunity to…

- **Connect components in decentralized power unit**, e.g. heat pumps, PV, EV-charging
- **Optimize costs based on market signals, e.g.** energy prices and regional load
- **Generate revenues** by participating in energy market with assets





How Big Is the Problem?

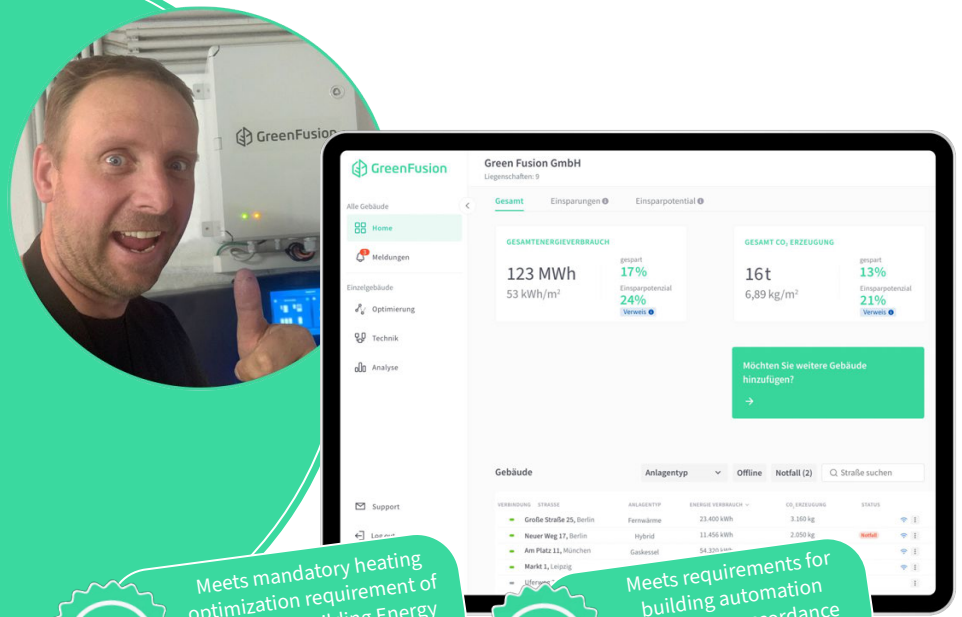
35 Mio

European multifamily houses

80% still conventional.

“The success of the energy transition depends on the operating system”

Our solution: The AI driven 360° energy management platform for the housing industry.



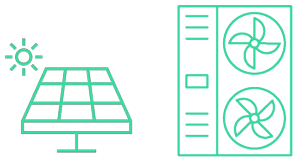
Meets mandatory heating optimization requirement of Germany's Building Energy Act §60b GEG

Meets requirements for building automation solutions in accordance with §71a GEG

TÜVRheinland ZERTIFIZIERT
Regelmäßige Überwachung
www.tuv.com ID 0000088020

Digital remote control & automated optimization of your entire system operation

conventional heating systems



renewable energy systems

Our service promise.

We digitize, optimize and automate your heating operations.

We reduce consumption, costs & CO_2 emissions.

We ensure the economic transformation and operation of regenerative systems with heat pumps, PV, etc.

How we guide our customers through the transformation.

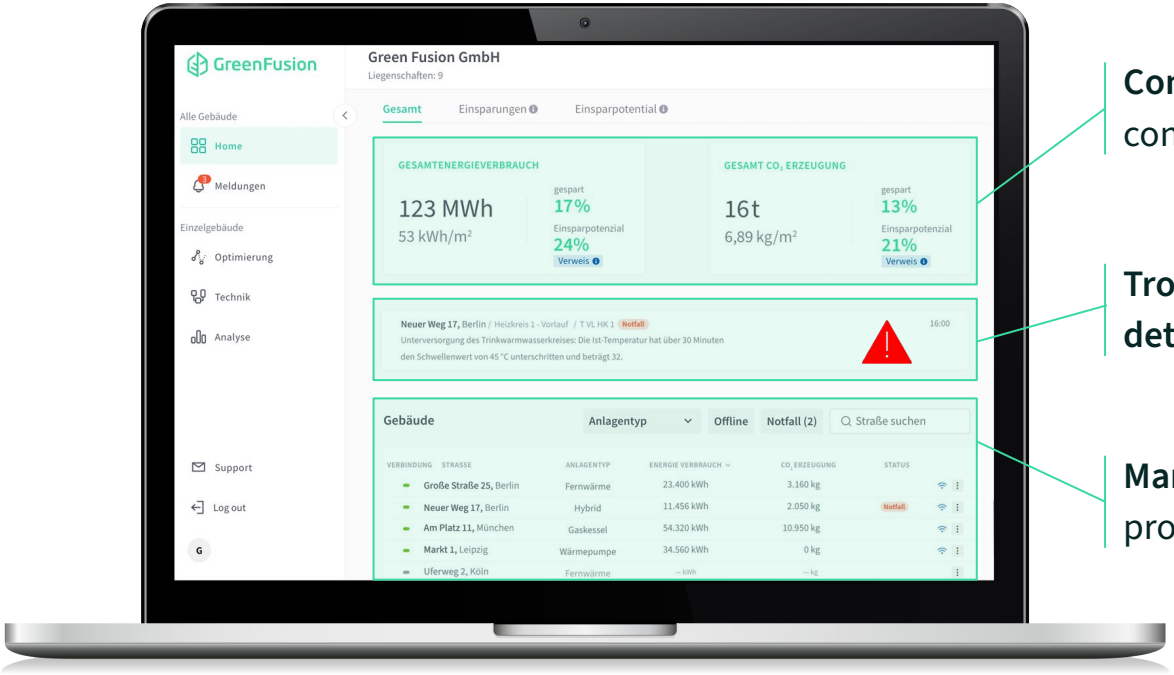
1. **Digitalisation, optimization & automation**
   Make existing systems intelligent with our Energy Saving Pilot

2. **Savings & transparency**
   Save directly Ø 16% and introduce real-time data

3. **Data-driven transformation planning**
   Introduce renewable systems with a “success guarantee”

4. **Operate the “House of the Future”**
   AI-based, cross-sectors load management, dynamic electricity pricing, and more

Our Energy Saving Pilot: Web Application

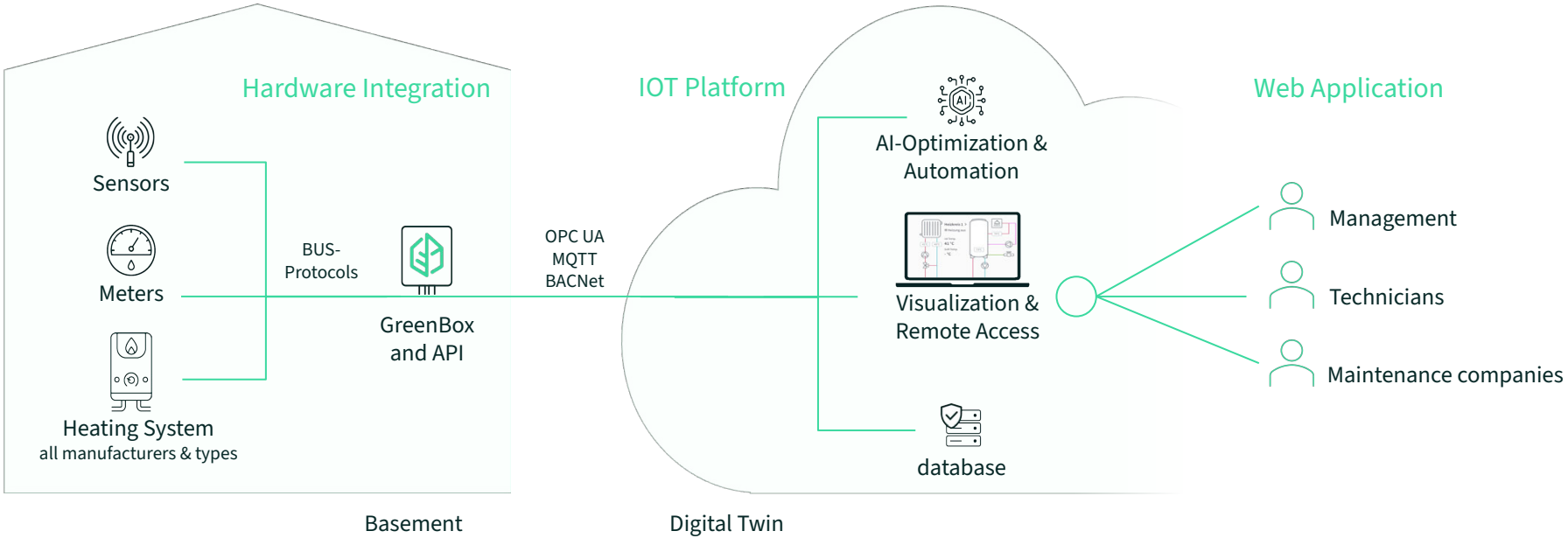


Controlling: Central monitor for energy consumption & savings for portfolio

Troubleshooting: Failure prediction & detection to reduce maintenance effort

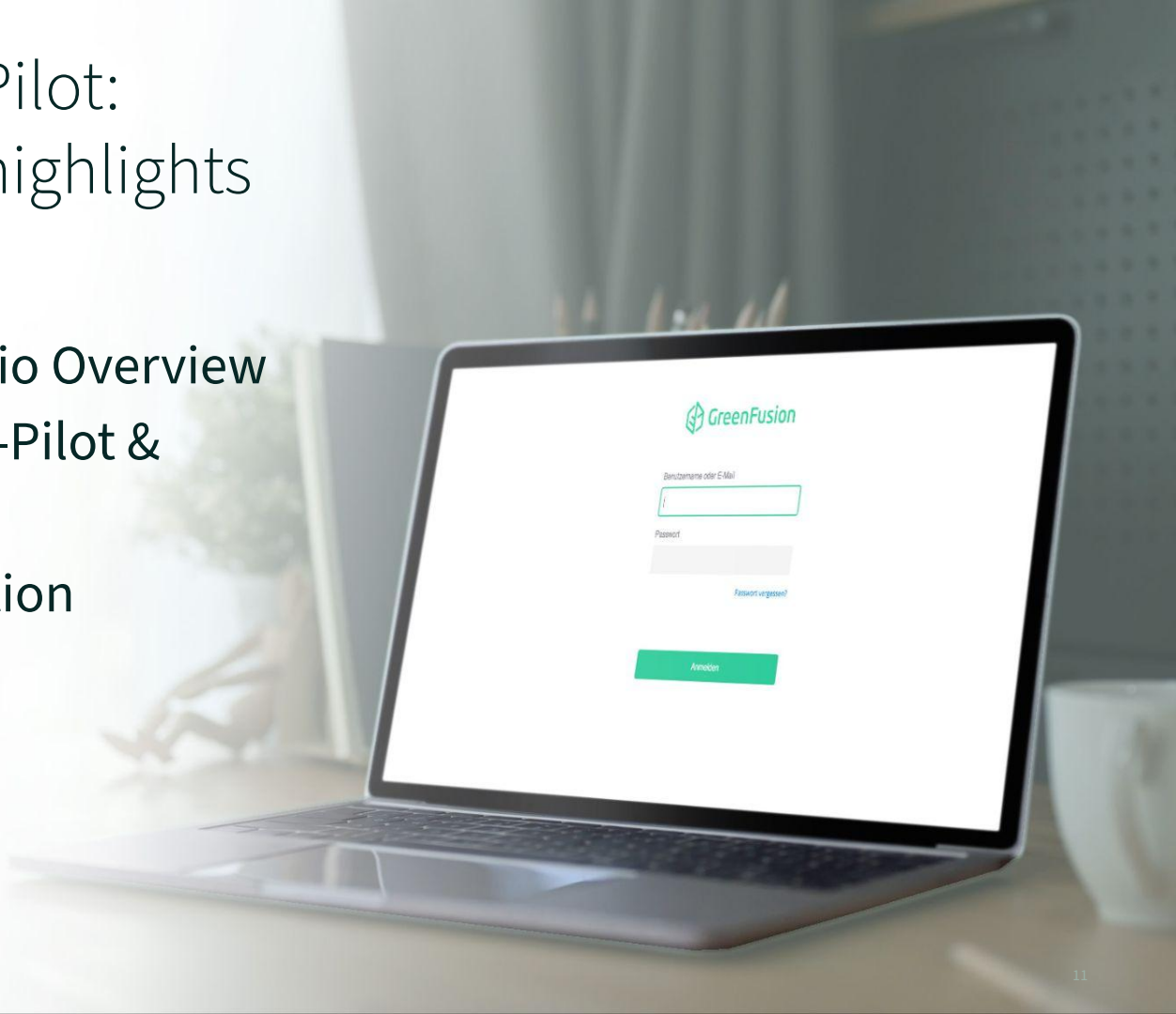
Managing: Digital twin for time-saving property mgmt & tenant interaction

Our Energy Saving Pilot: Architecture & function overview.



Our Energy Saving Pilot: Function & feature highlights

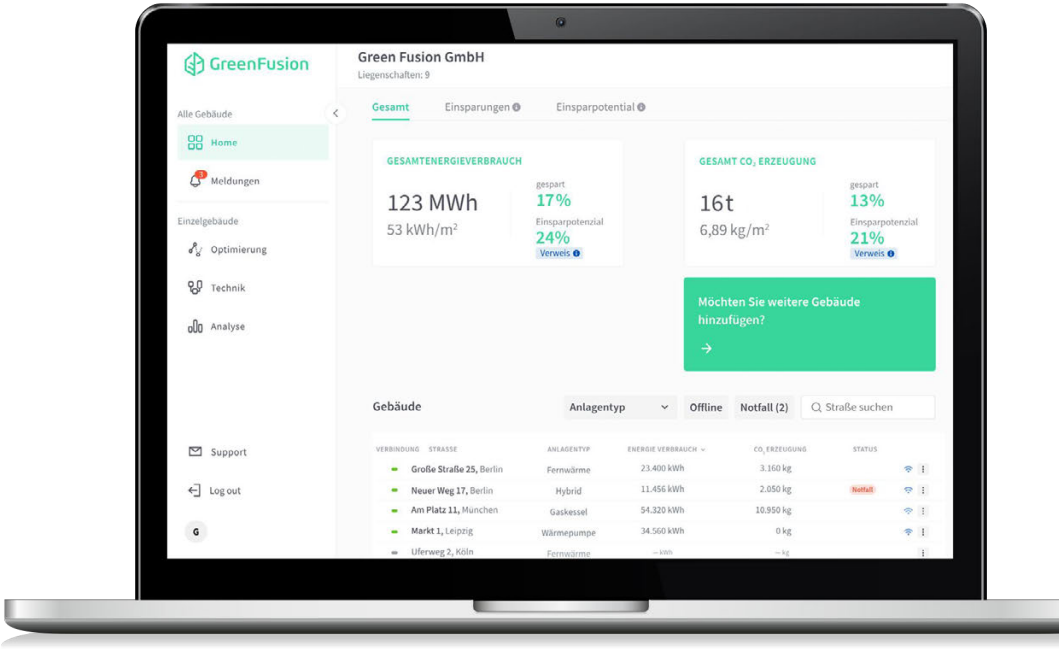
1. Dashboard & Portfolio Overview
2. Remote Access Auto-Pilot & Automation
3. Analysis & Optimization
4. Alarms



1. Dashboard & Portfolio Overview

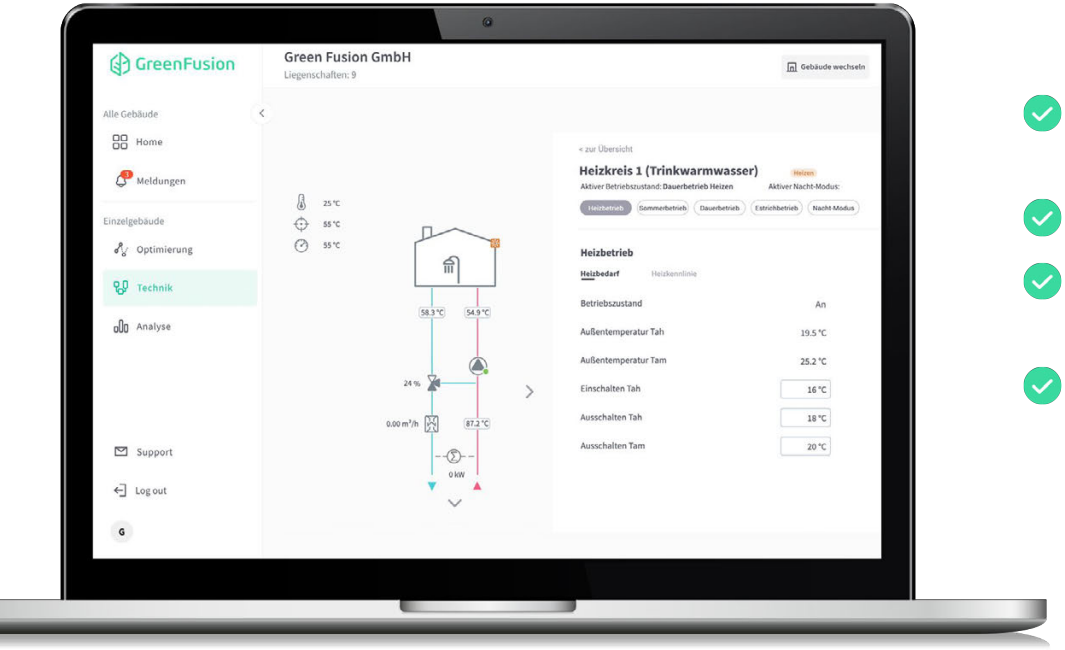
Thanks to clear process visualization and modern control technology, you not only have your systems in view but also under control.

- Central control & monitoring of all systems
- Energy consumption, CO_2 emissions & savings tracker
- Error messages, fault alerts & alarms; messages sent directly to responsible person of particular asset



2. Remote Access & Automation.

Semi-automatic in Co-Pilot mode or fully automatic in Auto-Pilot mode, your systems are optimally set. We can also make manual corrections for you via remote access if required.

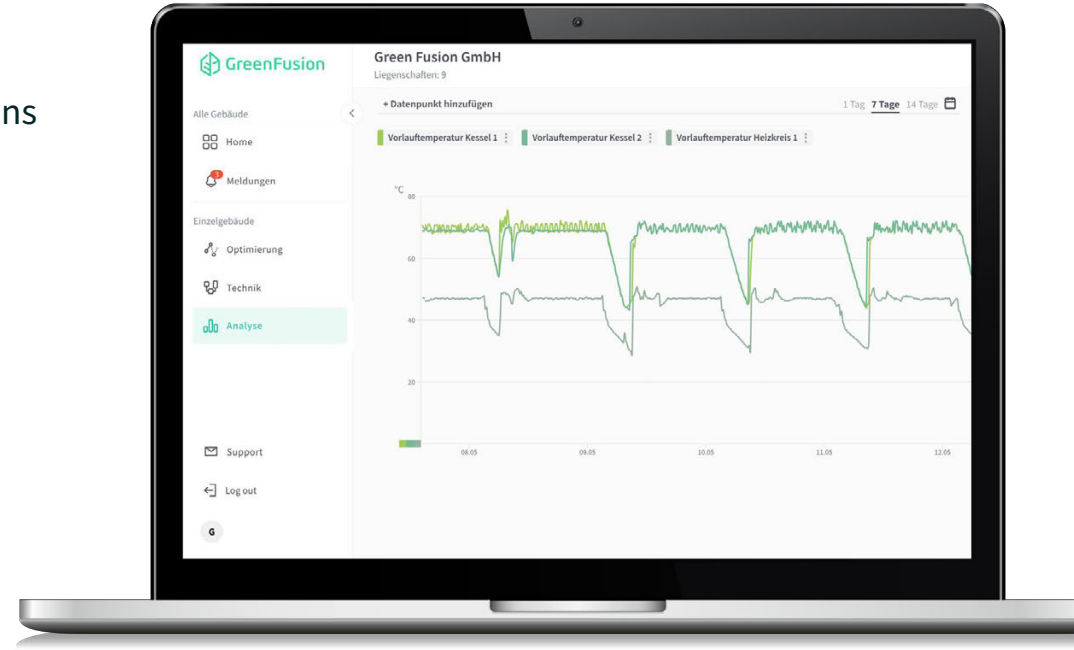


- ‘Lights on’ in the boiler room: real-time temperatures and much more
- Remote access to relevant settings
- Dynamic adjustment of temperatures and other heating curve parameters
- Dynamic detection & countermeasures in the event of deviations from characteristic curves

3. Analysis & Optimization.

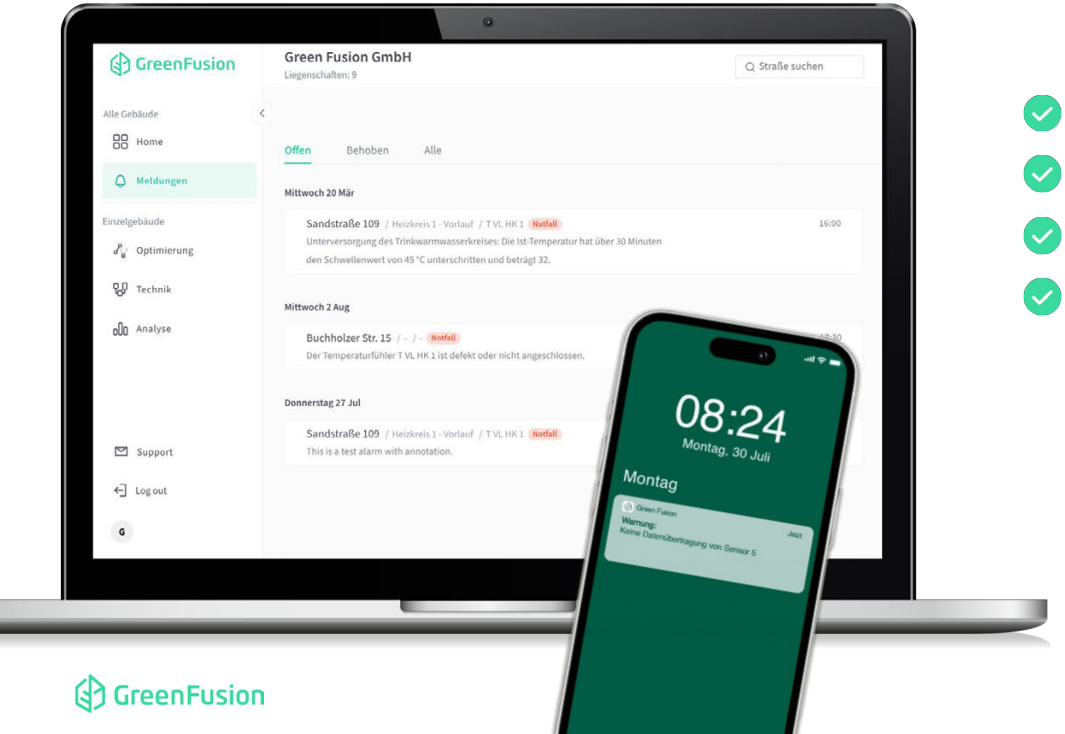
Quickly recognize and immediately realize potential savings. Semi-automatic or fully automatic, according to your needs.

- Clear visualization with clear recommendations
- Holistic, AI-based system optimization
- Cross-sector load management
- Simple export of measurement data & consumption, current and historical



4. Alarms.

Notification of the responsible persons allows you to intervene quickly. Before failures occur.



- Emergencies & fault messages
- Notification of responsible persons
- Detailed error messages
- Reduction of breakdowns, maintenance costs & fault clearance trips

Use Cases – Overview.

Gas Boiler

16%
∅ energy savings
e.g. through

- Reduction of return temperatures
- Optimization of level of utilization
- Optimization of cycle behaviour

District Heating

16,5%
∅ energy savings
e.g. through

- Forecast & reduction of peak loads
- Check maximum load needed
- Minimize heat losses in the distribution system (consumers)

Heat Pump

18%
∅ energy savings
e.g. through

- Reduction of return temperatures
- Source temperature management
- Identify optimal operating times

PV & Heat Pump

25%
∅ energy savings
e.g. through

- Intelligent coupling of PV & heat generation (sector coupling)
- Planning of heat production based on weather / price data
- Source temperature management

CHP

16%
∅ energy savings
e.g. through

- Active storage management
- Demand-oriented heat and power production
- Identification of optimal utilisation times

Example use case – Optimization Gas Boiler.

> The implementation in the pilot projects was successful and we are now continuing the integration in the full portfolio.

Alfredo Esposito, Sustainability Lead, DIE EHRENFELDER

DIE EHRENFELDER
Gemeinnützige Wohnungsgenossenschaft eG

Parameters

- Different buildings with > 7000 m^2
- Built in 1984-1987
- Gas boilers with central hot water production

Savings through

- Digitalization of the system, data acquisition, evaluation and analysis
- Intelligent optimization of system operation
- Automated error and fault notifications

-16.800 kWh
savings for central hot water only.

Example use case – Active sector coupling (PV + HP).

> The digitalisation of our boiler rooms with Green Fusion plays a central role in our ‘2045 - Way to Zero’ climate strategy in order to achieve quick wins.

Lars Lippelt, Managing Director, KHW

Active Sector Coupling

KHW®

Parameters

- 2023 built new building
- 8 apartments
- Fully electric/ CO_2 neutral energy system
- EH55 Efficiency Standard

Savings through

- Maximizing efficiency and effectiveness of the heat pump
- Maximization of own power consumption
- Intelligent, cross-sector energy management

A no-brainer business case for every housing company

16% savings = **-1.6 Mio €** energy costs & **-3.45 Mio kg** CO2

\+

Fulfilment of regulatory requirements

Increased portfolio value through improved energy efficiency classes

No capex, “earnings” from month 1

Example case: 500 buildings. Heated with gas. 10 Mio € energy costs plus 500k € costs for Green Fusion platform. CO_2 pricing costs at €45/t + consumption costs at € 0.08/kWh gas.

Green Fusion – not just any startup.

Team

50+

- Engineers
- Developers
- Designers
- Data scientists
- Automation technicians
- Energy technicians
- Business developers

Inception

Research since 2015, company founded 2021 by energy engineers in Berlin/Brandenburg after EXIST grant funding from Technical University of Berlin (TU Berlin).

AI Funding and Research

Together with the Hermann Rietschel Institute & TU Berlin, we are working on AI for the boiler room of tomorrow as part of a federally funded energy research program.

1500+ Systems live

100+ Customers

Investors

We are the market leader.

We are TÜV certified according to §71a GEG …

… and for our customers the heating inspection according to §60b GEG is not required.

Over **100** satisfied customers

Under the leadership of our new CIO, Chris Menzel, we are establishing a dedicated unit to optimize cross-sector energy systems.

!

We are building Europe's #1 energy operating system.

Over **1500** installations live

We are the **market leader** according to GdW 2024

Our **own installers** are on the road **throughout Germany**.

We have successfully completed our Series A financing with € 12 million

VIESMANN Climate Solutions

Viessmann Climate Solutions and Green Fusion agree on strategic partnership
More manufacturers to follow!

Partner der Immobilienwirtschaft

We are a **Vodafone** partner

We are supported by the Bundesministerium für Wirtschaft und Klimaschutz

We are in the news.

Jan 2025:
€12M
Series-A

Die Wohnungswirtschaft DW

IMMOBILIEN ZEITUNG
FACHZEITUNG FÜR DIE IMMOBILIENWIRTSCHAFT

WDR

n-tv

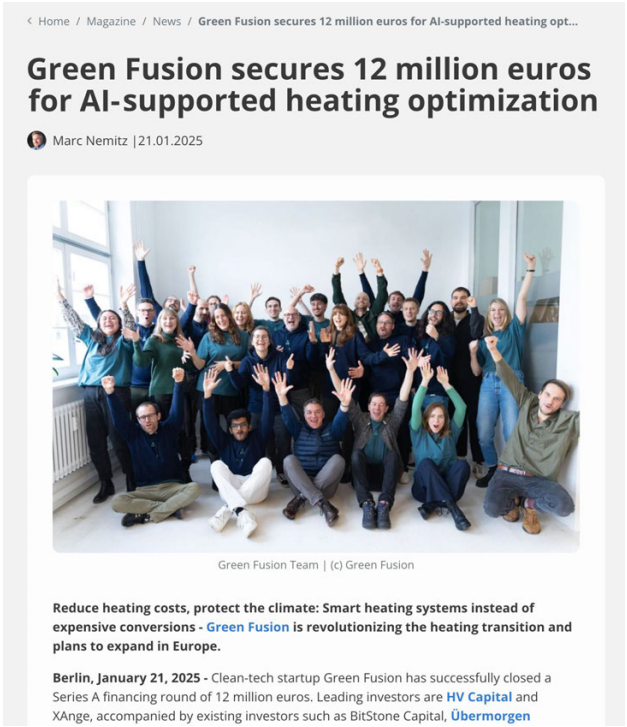
immobilien vermieten & verwalten

WELT

pv magazine

ZfK Zeitung für kommunale Wirtschaft

BUSINESS INSIDER



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Green Fusion secures 12 million euros for AI-supported heating optimization

Marc Nemitz | 21.01.2025

Green Fusion Team | (c) Green Fusion

Reduce heating costs, protect the climate: Smart heating systems instead of expensive conversions - Green Fusion is revolutionizing the heating transition and plans to expand in Europe.

Berlin, January 21, 2025 - Clean-tech startup Green Fusion has successfully closed a Series A financing round of 12 million euros. Leading investors are **HV Capital** and XAnge, accompanied by existing investors such as BitStone Capital, **Übermorgen**

Proven team of executors ready to scale beyond Series A

Business

Paul Hock*, CEO (business)

Successfully built GF company; established intern. team at Capgemini (FR) to strengthen collab between FR, DE, UK

Thomas Filkorn, CRO

Scaled several revenue teams (e.g. as HoS at Choco, Userlane & Stickerstars)

Chris Menzel, CIO

15 years of experience in the renewable energy industry in various management positions

In hiring, CFO/Chief of Staff

Scales & establishes international growth structure for +500 customers

Tech & Ops

Nina Germanus*, CEO (tech)

Built operations at GF and before global operations as Head of Virtual Power Plant at Sonnen

Matteo Zappulla*, CPO

Invented GF tech after leading industrial project “Märkische Scholle” (designed energy management system)

Simon Wagenknecht*, CEngO

Invented GF tech after leading industrial project “Märkische Scholle” (programmed energy management system)

Insa Haacke, Head of Ops

Developed the operational structures as Head of Organisation at AISEC

And more

50+ team members in engineering, sales & operations

Key investors from B2B SaaS, PropTech & ClimateTech

HV CAPITAL

BITSTONE CAPITAL

XAnge Siparex Group

Vireo VENTURES

Brandenburg Kapital | ILB

ÜBERMORGEN

kopa.

HIGH RISE VENTURES

Let’s save CO_2 and build Europe's #1 energy operating system!

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