



ÖkoFEN Company Presentation

Europe's Specialist in Pellet Heating

Sold in Finland by Ab WIFOTEK Oy
Mauritz Ketola, MSc

About ÖkoFEN



**100%
focused on
pellets and
solar**

Founded 1989

725 employees

Headquarter in Austria

9 subsidiaries (sales & service)

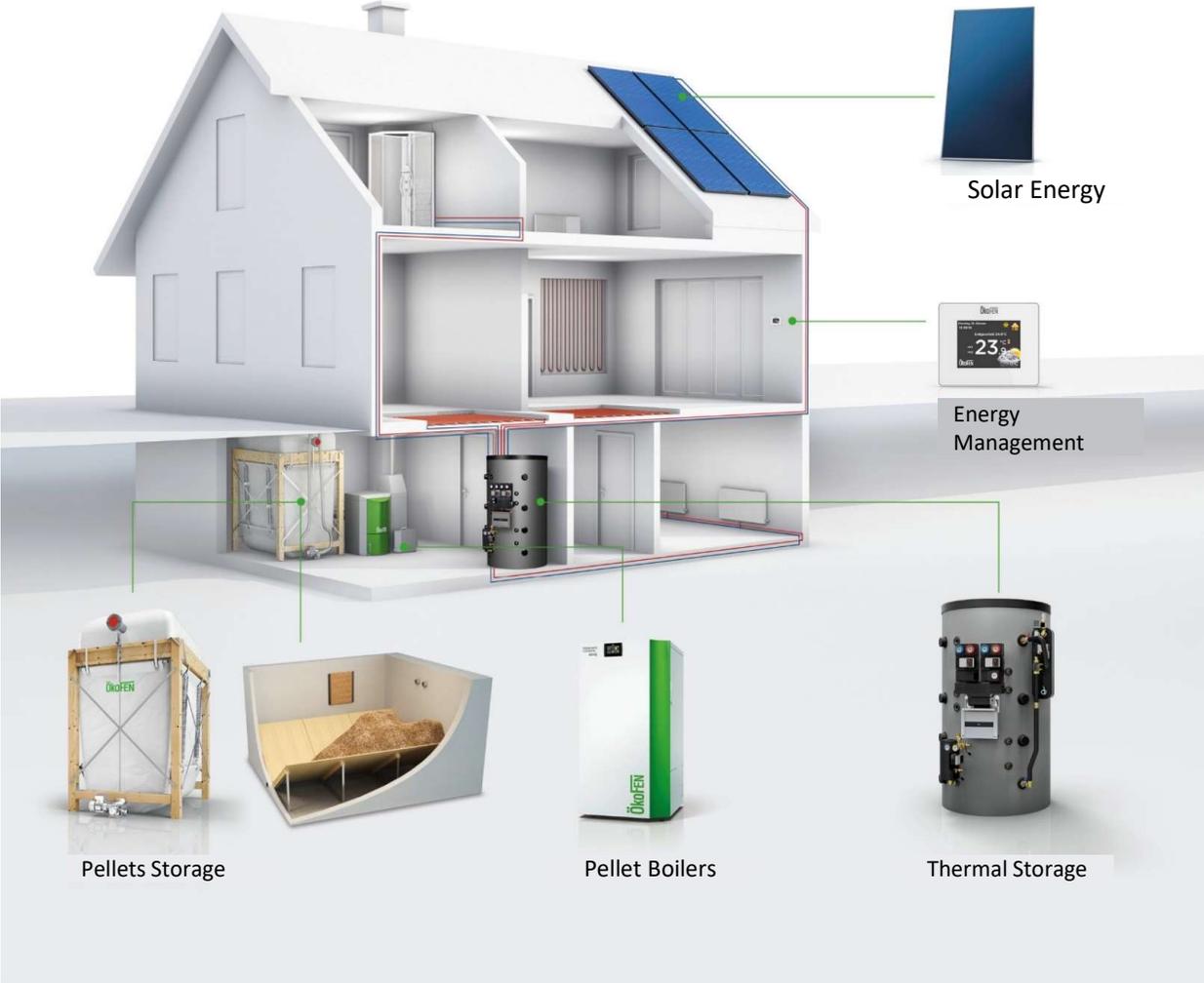
24 export markets

40 000 heating systems per year

135 000 heating systems installed

Since the development of the world's first type-tested pellet boiler in 1997, our goal has been to be the technology and market leader in heating with pellets.

About ÖkoFEN





Our Vision

A typical pellet boiler replacing an oil boiler saves

8.5 to CO2

every year!

(which is as much as 45 000 km by car or 13 flights from Vienna to New York)



135 000 ÖkoFEN Pellet Boilers



9 Mio. tons CO2 Savings since 1989

Annual Emissions of all Diesel cars in Austria



4 000 000x people flying from Vienna to New York.



3x the savings of all Tesla electric cars



ÖkoFEN_e

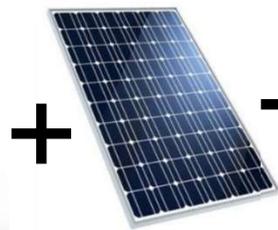
Electricity and heat out of
wood pellets

myEnergy365

Electricity producing pellet boiler for residential homes



Pellet boiler



Photovoltaic



Battery System



Stirling Engine



100% green Energy
EUR 0,- electricity costs
100% security

Product Features

Pellematic Condens_e

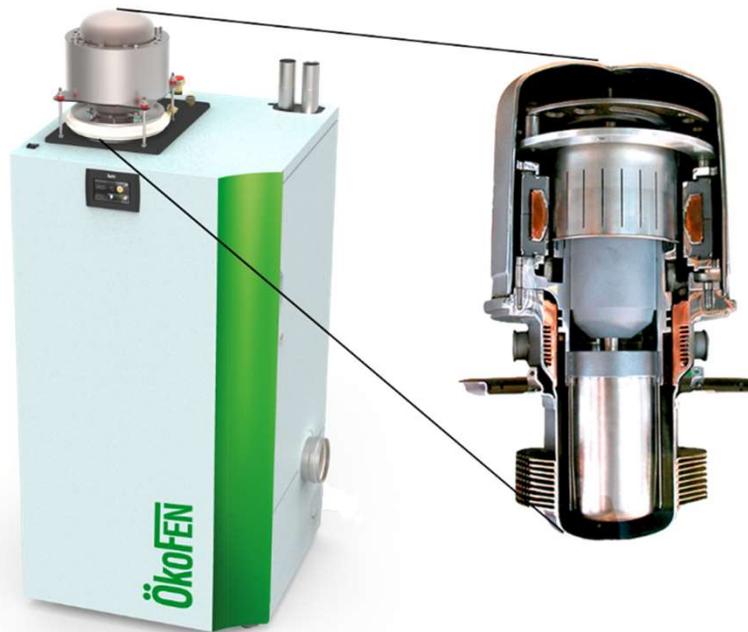
ÖkoFEN

Pellematic Condens_e

Extremely
compact
condensing boiler

10 - 16 kW
(34 000 - 54 000
BTU/hr)

Most efficient
pellet boiler
worldwide



More than 200 000 hours
field experience

Microgen Stirling Engine:

Max. 1 kWe
Nominal: 600 W

50 kg

No additional
maintenance, no
wear parts

Very silent operation
(max 54 db)

It is possible to install the
boiler now and add the
Stirling later

My off-grid house

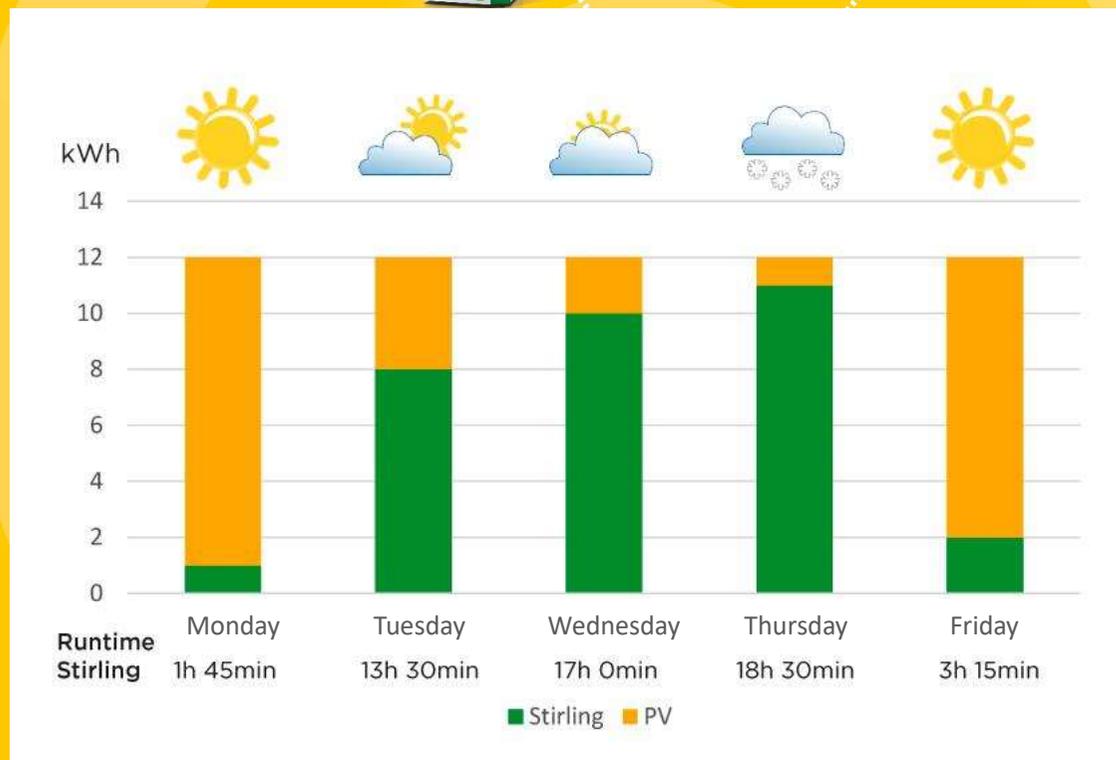


My off-grid house

Condens_e



Electricity consuming devices



Sample Day



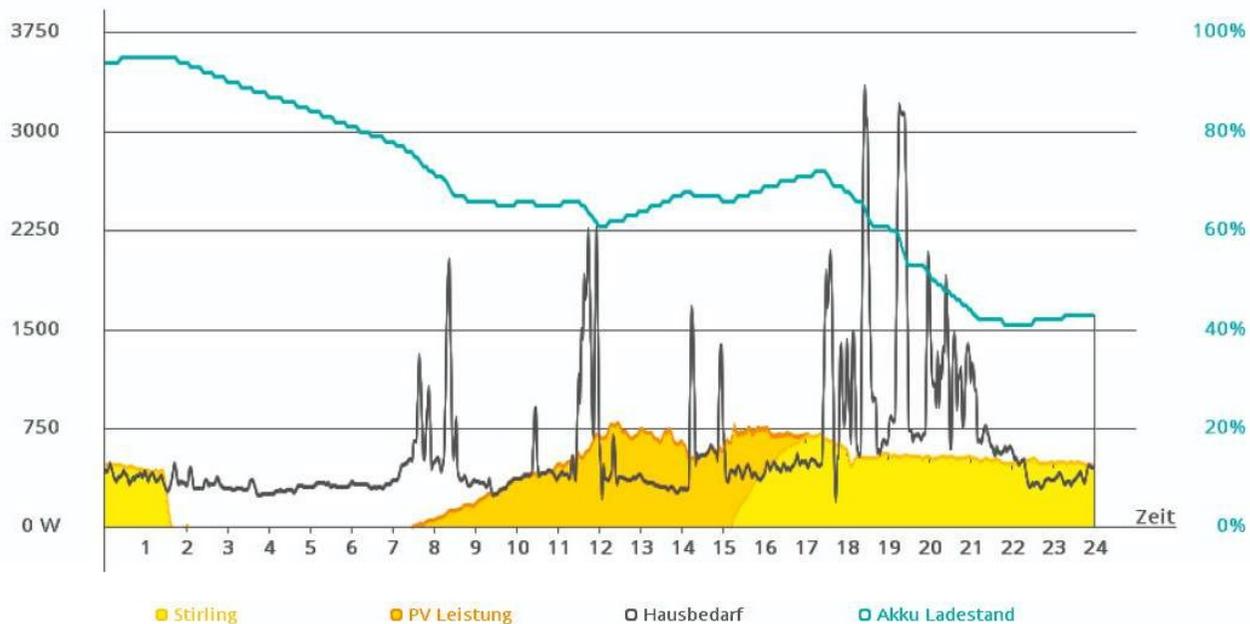
Pilot Installation in Lembach, Upper Austria

2500 sqft, 4.4 kWp PV, 9.6 kWh battery, Pellematic Condens_e

Thursday 25. Jan 2018

Average outside temp.: -3.4 °C (25°F)

PV: 8.4 kWh, Stirling: 5.2 kWh (9 h), Usage 13.6 kWh, **el. from grid: 0 kWh**



Products

Wood Pellet Boilers,
Pellet Storage Systems,
Buffer Tanks and Solar Collectors

Products

More than 135 000
heating systems installed



PELLET BOILER
TECHNOLOGY



PELLET STORAGE
SOLUTIONS



SOLAR AND BUFFER-TANKS
TECHNOLOGY

Product portfolio



1/3 of our customers use a semi-automatic solution - hand filling of bags

Premium Segment with upgrade option to fully automatic solution: ÖkoFEN



Economic Solution:
Easypell sub-brand „produced by ÖkoFEN“





Products

High efficiency and low emissions for all ÖkoFEN products

Performance range from

4 kW / 13,500 BTU/h

up to

256 kW / 873,500 BTU/h

(cascade systems)



ecc technology

High efficiency and low emissions by sophisticated combustion technology



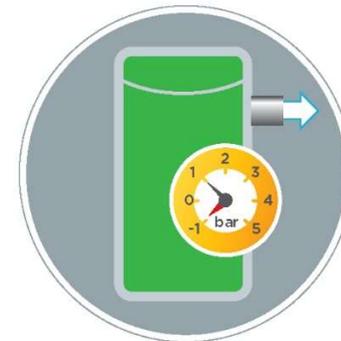
Efficient Combustion Control



MULTI-SEGMENT BURNER PLATE



COMBUSTION CHAMBER SENSOR



NEGATIVE PRESSURE MONITORING

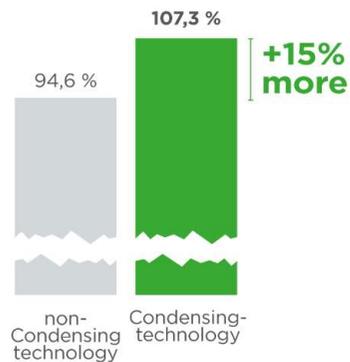


Pellematic Condens

The new dimension in pellet condensing
technology

Condens technology

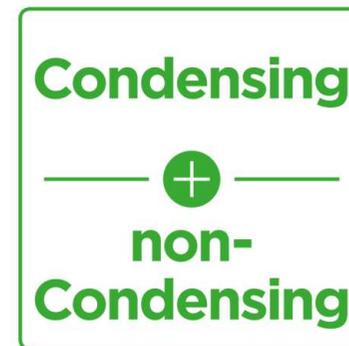
The new dimension of condensing technology



ENERGY GAIN



CLEAN TECHNOLOGY

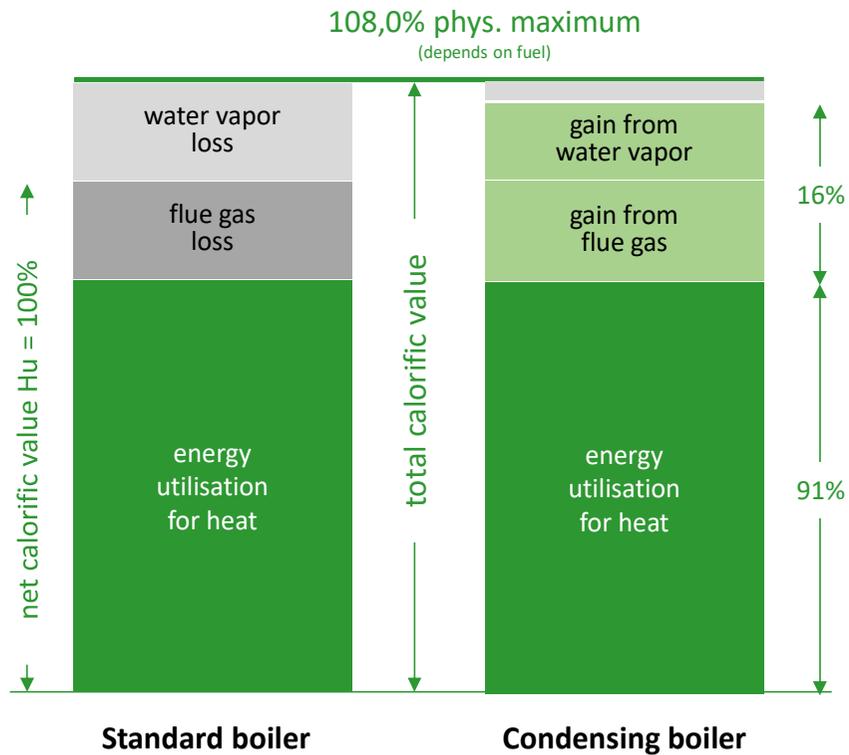


FOR ALL
HEATING SYSTEMS

Efficiency more than 100%?



The most efficient pellet boiler worldwide



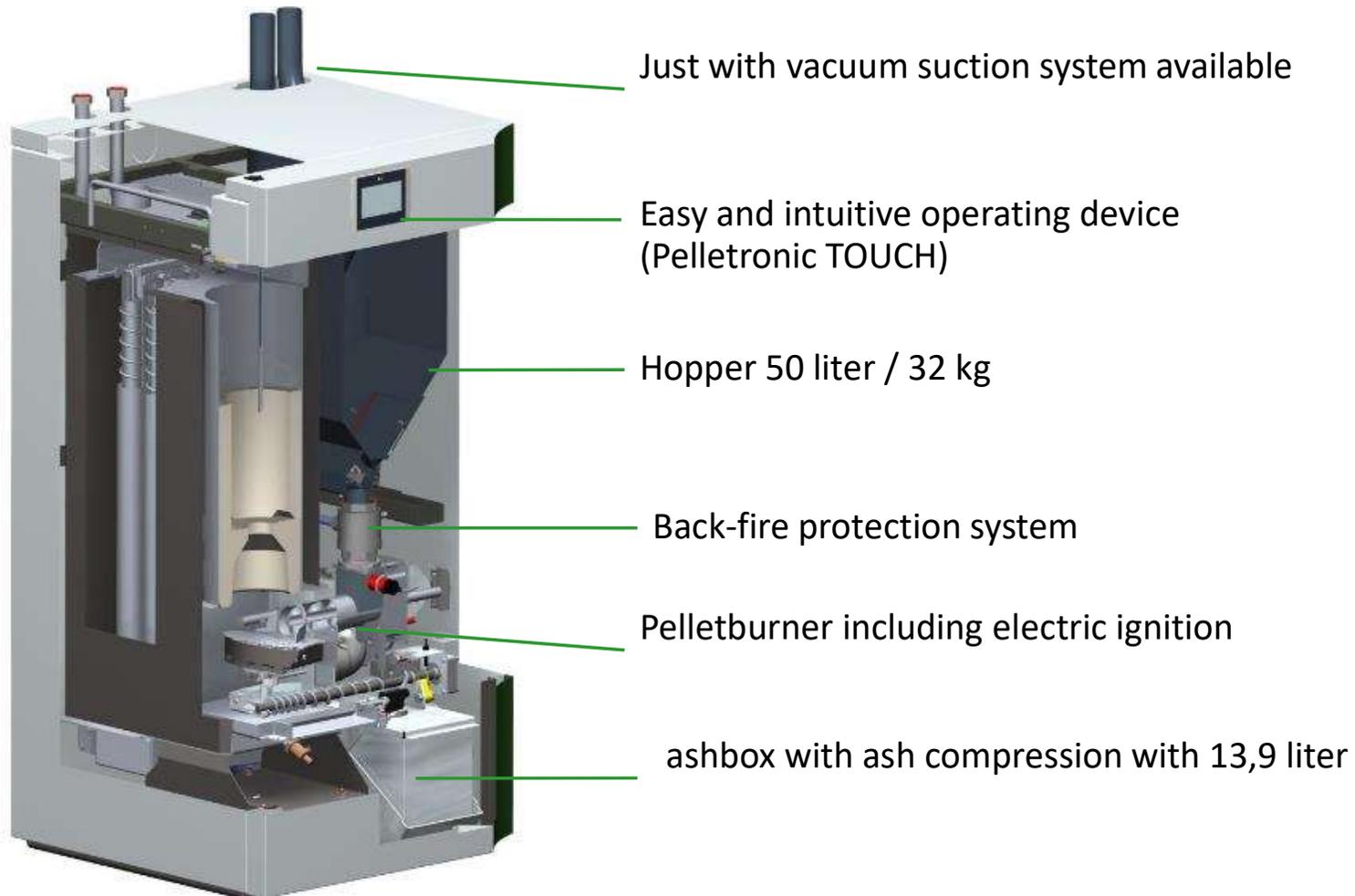
Pellematic Condens power range



Two physical boiler sizes

Type	Partial load	Rated power
Condens 10	3 kW	10 kW
Condens 18	6 kW	18 kW
Condens 22	7 kW	22 kW
Condens 32	10 kW	32 kW

components overview





Pellematic Smart XS

The all-in-one boiler with pellet condensing technology

The all in one solution

- ✓ Pellet boiler
- ✓ Buffer storage
- ✓ Heating circuits
- ✓ DHW production
- ✓ Solar and PV option



Smallest space requirements

- ✓ only 0,9m² surface
- ✓ 104 x 85cm
- ✓ up to 18 kW
- ✓ Condens technology



The logo for ÖkoFEN, featuring the word "ÖkoFEN" in white, sans-serif font. The "F" is stylized with a horizontal bar extending to the right. The text is set against a solid green square background.

ÖkoFEN

The logo for ZeroFlame TECHNOLOGY, featuring the words "ZeroFlame" in a white, italicized, sans-serif font, with "TECHNOLOGY" in a smaller, white, sans-serif font below it.

ZeroFlame
TECHNOLOGY

A stylized, colorful flame graphic with a bright orange and yellow core, transitioning into blue and purple at the bottom. It has a soft, ethereal glow and is positioned behind the main text.

Feuer

neu erfunden

The cleanest ÖkoFEN pellet heating system of all times

Milestones



2020: ZeroFlame:
New combustion technology



2020
Pellematic Condens with ZeroFlame-Technology
The cleanest ÖkoFEN pellet heating system ever

How does ZeroFlame® work

Fire re-invented

The specially developed air flow creates a fire – without a flame.
This reduces fine dust particle emissions to a minimum.
The only thing left is: heat and clean exhaust air!



without ZeroFlame®
regular low-dust operation



with ZeroFlame®
dust emissions close to zero





The benefits of ZeroFlame®

As simple as possible



no high-voltage particle
filter needed



always works;
also during start- and stop phases



no additional maintenance



reliable technology and
simple construction



low cost

Convincing in the lab



- Type test acc. EN303-5 in December 2020
- Test lab results under perfect conditions
- 6 hour constant heat output

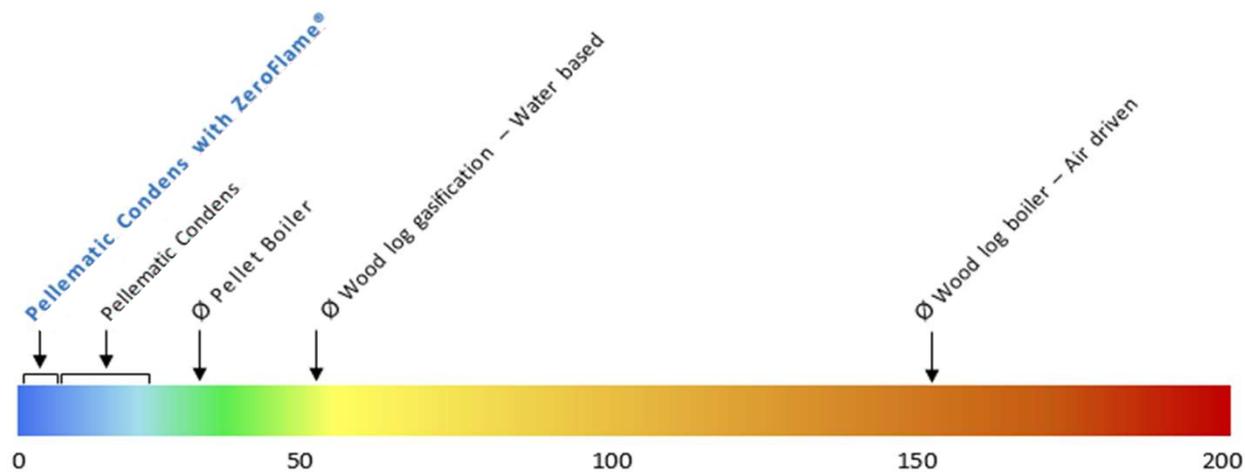
	dust mg/m ³ (13% O ₂)	
	nominal load	partial load
Condens ZeroFlame 5-18 kW	0,5	1,7

In comparison with other wood heating systems



PRACTICE – DUST EMISSIONS

[in mg/m³] at 13% O₂



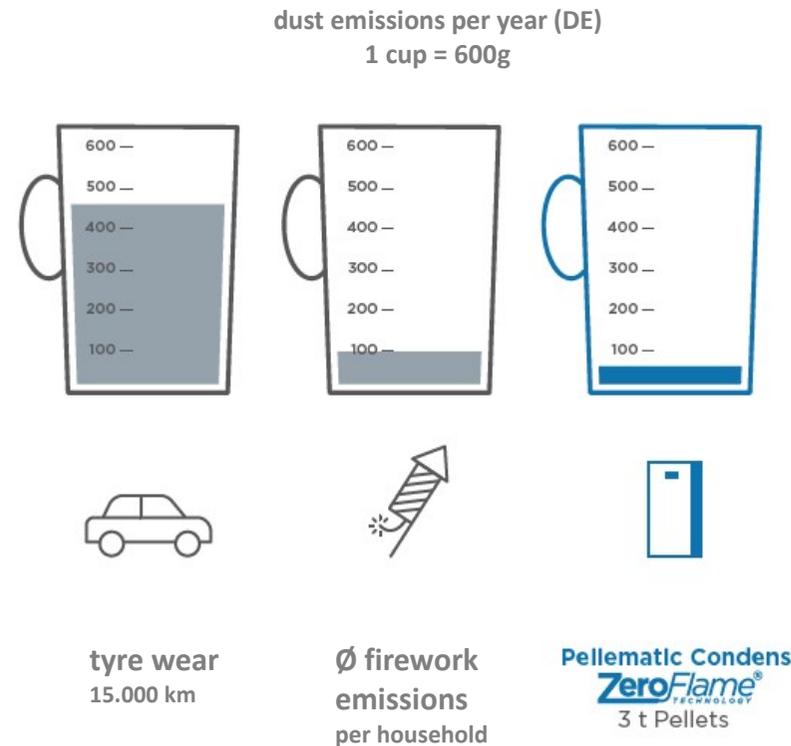
Quelle: Emissionsbilanz erneuerbarer Energieträger - Bestimmung der vermiedenen Emissionen im Jahr 2018, Deutsches Umweltbundesamt, ÖkoFEN

In comparison with other sources of emissions



The comparison with other every day fine dust sources clearly shows:

- A pellet boiler with this technology emits only about one tenth of the tire abrasion of an average passenger car
- and less than the average emissions per household for new years evening fireworks in Germany



Thanks for
your attention

100%

**RENEWABLE
WITH PELLETS
AND SOLAR**



More information
www.okofen.com
www.okofen-e.com