# Reducing Energy Costs & CO<sub>2</sub> Emissions

Recovering heat from flue gasses, steam and process air







# 1 THE CHALLENGES

Many industries face the challenge of having to reduce energy consumption and minimize their carbon footprint by focusing on green energy.

## **3 MAJOR CHALLENGES**







#### Sources of waste heat:

- Boilers, furnaces, heaters, kilns, combustion turbines, engines etc.
- Exhaust air from ovens, dryers etc.
- Hot liquids or water from processes
- Steam from various sources
- Hot products discharged from the heating equipment (e.g. hot steel, clinkers, glassware, castings)
- Radiation convection heat from hot sources (e.g. ducts, conveyors)
- Cooling air from compressors
- AC-/climate control systems

# Typical food & beverages industries generating waste heat



Bakeries



Food production



Industrial coffee roasteries



Juice production



Breweries & Distilleries



Dairies

# Light and heavy industries generating waste heat



Heat treatment plants



Can manufacturing



ufacturing Paper mills



Industrial painting



Metal processing



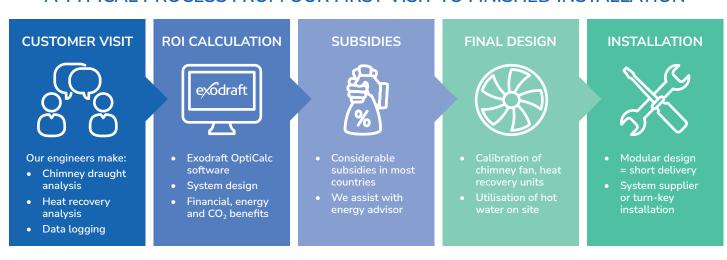
Automotive industry

# THE SOLUTION & PROCESS

We supply the heat recovery solution and take care of the complete process from start to finish.

Thanks to our extensive range of services and experience, we can analyse, plan and implement your system while tailoring it to your individual needs and requirements.

### A TYPICAL PROCESS FROM OUR FIRST VISIT TO FINISHED INSTALLATION



# WE OFFER AFTER SALES SUPPORT



**Staff Training** 



Preventive check & optimisation



Maintenance



Professional advice

# **ROI** Calculation



Using our Exodraft OptiCalcHR<sup>TM</sup> software, we can calculate how much energy can be recovered, how much you can save and how much less  $CO_2$  will be emitted. Get in touch with us today and let us calculate your savings potential.

### **Remote Monitoring**

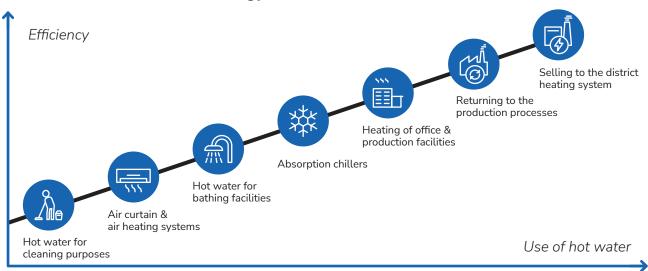


With Exodraft Trendlog, you can monitor your energy savings and overall heat recovery performance online and in real-time. Trendlog data can also be used to analyse errors and find optimisation options on your system.

# 3 THE USE & BENEFITS

By turning flue gasses, steam or hot process air into hot water, the basis is created for reusing otherwise wasted energy – saving money, reducing  $CO_2$  emissions and helping the environment.

## Where to use the recovered energy:





The Basic Series can be supplied as a single or modular system

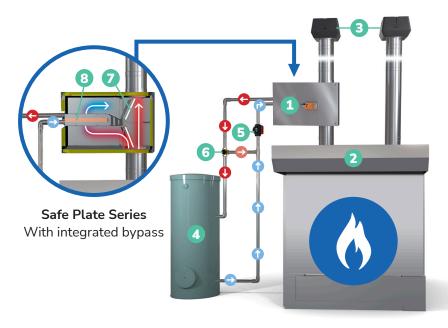
## Benefits of choosing an Exodraft heat recovery system:

- Quick return on investment usually less than 2 years
- Most compact and lightweight heat recovery system on the market
- Easy maintenance due to removable heat exchangers
- Our bypass systems ensure stable and continuous operation
- A single dedicated contact person to ensure the best customer service experience
- PLC control allows for both onsite and remote control and monitoring (optional)
- Can be installed in both vertical and horizontal orientations



# THE SYSTEM

By installing an Exodraft heat recovery system, excess heat from flue gasses, steam or hot process air can be turned into hot water without influencing production uptime.



- Safe 250 heat recovery unit
- 2 Heat generating process, e.g. boiler, engine, oven, dryer
- Exodraft chimney fan which ensures an optimal draught and perfect production results
- Buffer tank to store hot water for later use
- Circulation pump
- 6 3-way mixer valve which ensures correct temperature of the water
- Integrated bypass damper
- 8 Compact heat exchanger

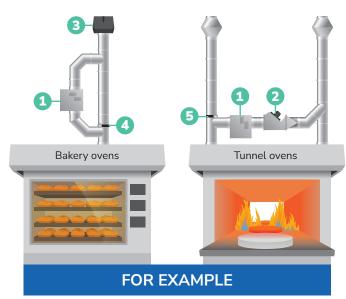
### Concern:

Will Exodraft heat recovery affect the reliability of my production?

#### **Answer:**

No – our bypass system ensures no change in uptime.

- Basic 500 heat recovery unit
- 2 Exodraft CFIR-inline fan
- Exodraft chimney fan
- 4 Exodraft bypass damper BD350 (single chimney)
- 5 Exodraft bypass damper BD350 (separate chimneys)



#### THE COMPLETE SYSTEM

With our efficient air-to-water heat exchangers, modern chimney technology and smart controls, we are able to supply a unique solution that benefits your production and economy, as well as the environment.











Chimney & Inline Fans

Controls

Exodraft is a Danish company that manufactures and develops particle reduction, chimney draught and heat recovery systems for various industries and private users worldwide.

#### A clear mission:

We want to develop and market particle filters, chimney fans and heat recovery systems of the highest possible quality for the sake of improving both human lives and the environment.

### Comprehensive knowledge:

Our solutions are built on more than 60 years of experience within chimney draught technology as well as extensive knowledge about the relationship between combustion and the draught in the chimney.

# ISO certified quality:

At Exodraft, we constantly optimise and develop our products further. Quality and documentation are two of the cornerstones in the development of our products. We are ISO9001 certified which is why we can document our high quality.

Visit our website for more information:

www.exodraft.com

### DK: Exodraft a/s

Industrivej 10 DK-5550 Langeskov Tel: +45 7010 2234 Fax: +45 7010 2235 info@exodraft.dk www.exodraft.dk

### SE: Exodraft a/s

Kalendevägen 2 SE-302 39 Halmstad Tel: +46 (0)8-5000 1520 info@exodraft.se

### NO: Exodraft a/s

Storgaten 88 NO-3060 Svelvik Tel: +47 3329 7062 info@exodraft.no www.exodraft.no

### **UK: Exodraft Ltd.**

24 Janes Meadow, Tarleton GB-Preston PR4 6ND Tel: +44 (0)1494 465 166 Fax: +44 (0)1494 465 163 info@exodraft.co.uk www.exodraft.co.uk

#### DE: Exodraft a/s

Niederlassung Deutschland Soonwaldstr. 6 DE-55569 Monzingen Tel: +49 (0)6751 855 599-0 Fax: +49 (0)6751 855 599-9 info@exodraft.de

#### FR: Exodraft sas

78, rue Paul Jozon FR-77300 Fontainebleau Tel: +33 (0)6 3852 3860 info@exodraft.fr www.exodraft.fr

