HEAT RECOVERY FROM WASTE, ENERGY EFFICIENT MANUFACTURING

Does your company produce waste that has to be disposed of complicatedly or even at a cost? Our solutions will enable you to recover heat from your waste and return it to your manufacturing process as heat or power.

As your technology partner, we will support you from the feasibility study and the economic feasibility study up through the development and operation of the system in your company.

From the Feasibility Study to Operation
We will study the technical feasibility of potential conversion systems for your wastes and determine their cost effectiveness. In the process, we will draw on our extensive portfolio of analysis methods, test systems and simulation tools. Within a few weeks, you will receive reliable information on the feasibility and means of converting your waste can into energy as well as related expenditures or revenues.

Our technological expertise in combustion, thermochemical gasification and waste pyrolysis enables us to develop the right system for you and support you during its commissioning and operation. Our solutions will allow you to cut your energy and disposal costs, reduce your use of fossil fuels and, thus, boost your energy efficiency long term.
Using Instead of Disposing of Waste

We have studied the feasibility of heat recovery from numerous wastes from a wide variety of industries:

**Industry and manufacturing**
- Organic wastes from automotive manufacturing
- Rejects from paper recycling
- GRP waste from rotor blade manufacture
- Waste from metal coating
- Distillers dried grains from beer brewing and pomace from wine making
- Sorted animal feed waste
- Sorted mixed construction waste

**Energy production**
- Digestate from biogas plants
- Dried solubles from bioethanol production

**Agriculture and forestry**
- Straw
- Chaff
- Landscaping material
- Meat and bone meal
- Chicken excrement

**Sewage treatment**
- Sludge

Do you not see your waste listed? Perhaps it contains inflammable components. We would be glad to check that. Simply contact us.

Other R&D Services

In addition to technical and economic feasibility studies of heat recovery from waste, we provide other services, including:

- Assessments of existing waste recovery methods and systems with the goal of optimizing or changing the feedstock,
- Formulated concepts to integrate waste (heat) recovery in your manufacturing process,
- Detailed engineering, general planning and commissioning of a pilot waste recovery system,
- Assistance when applying for funding for R&D of waste recovery.

Rely on Our Experience

The Fraunhofer IFF’s Process and Plant Engineering Business Unit has years of experience recovering heat from waste. Our core expertise is fluidized bed combustion and gasification systems, entrained flow combustion systems and gas conversion systems. We have an extensive portfolio of test equipment with thermal outputs of 5 kW to 1 MW at our disposal for these technologies.

These technical options are supplemented by advanced simulation systems and special software applications.

Rely on our top team of experts in process engineering, process equipment and plant engineering, instrumentation and control engineering and computer simulation.

They will contribute their extensive project experience and their latest research findings to turn innovations into your success.

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