

Energy from Biomass

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energietechnik



URBAS – our company

Energy from biomass – this is the topic that has been with us for decades. Energy technology is a business segment in which we are successful internationally.

With committed employees, the highest quality standards and permanent innovation, we build systems that are among the best in their class.

Well-known companies in the sawing and timber industry, energy suppliers and many other companies that need process energy rely on our expertise and technology for their energy supply.

Turnkey reference plants in many countries provide impressive evidence of our capability.

The realisation of biomass energy systems that meet the highest requirements in terms of economy and ecology – this is the standard we set ourselves!

This is what we stand for!

Andreas Urbas Josef Urbas Peter Urbas

URBAS is an owner-managed technology company in the field of biomass energy technology. Founded in 1929, the company has many decades of experience in plant engineering and construction, especially in the construction of innovative biomass energy systems.

Biomass. Urbas. Energy.



URBAS has realised more than 1000 biomass energy systems worldwide in the power range between 1 MW and 50 MW, which prove themselves in their day-to-day operation – and are the best evidence of the expertise we have acquired over decades.

Bosnia
Germany
Estonia
Finland
France
Great Britain
Latvia
Norway
Austria
Romania
Serbia
Slovakia
Czech Republic
Ukraine
Russia
Kosovo
Japan
Slovenia
Croatia
Poland
Italy
Sweden
Ireland (Northern
Ireland)



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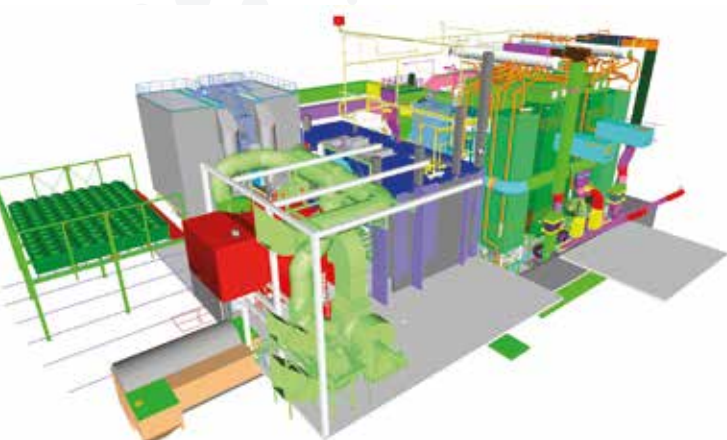
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Areas of expertise



PLANNING

URBAS ENERGIECHNIK employs more than 50 technicians in the planning and design of biomass energy systems. This enables us to realise individual systems for the generation of hot water, process steam and electricity.



LOGISTICS

URBAS ENERGIECHNIK has its own fleet of vehicles and logistics capacities consisting of special-purpose vehicles for transporting the largest system components. This ensures flexibility when it comes to system installation.



COMMISSIONING AND TRAINING

URBAS ENERGIECHNIK guarantees the timely start-up of every energy system through the use of experienced start-up technicians, and ensures a seamless handover of operations management to the customer through intensive training of the operating staff.

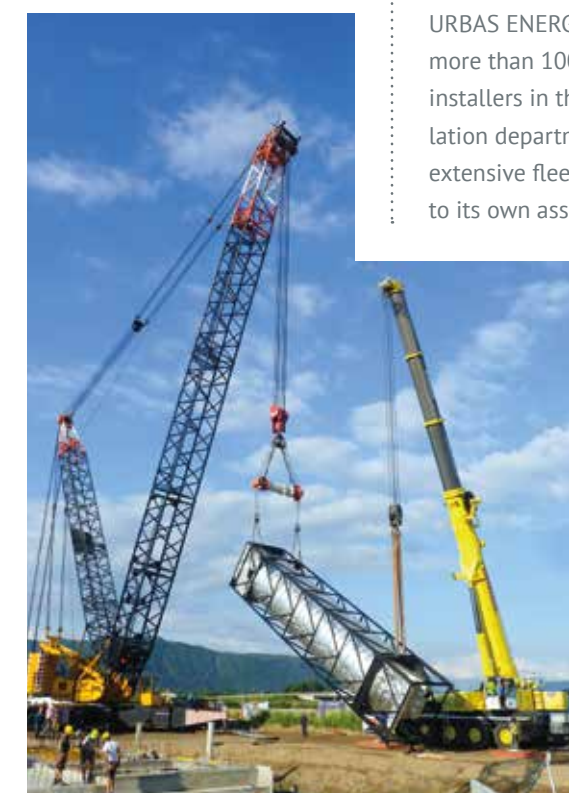
CONSULTING

URBAS ENERGIECHNIK has realised well over 1000 biomass energy systems and has decades of experience in the use of biogenic fuels to produce energy. The expertise we have thus developed enables us to provide well-founded consulting for project development.



MANUFACTURING

URBAS ENERGIECHNIK employs more than 250 people in the manufacturing of components for energy systems. Our 40,000 m² of manufacturing halls and the latest production systems enable a high level of vertical integration and short delivery times.



ASSEMBLY

URBAS ENERGIECHNIK employs more than 100 experienced system installers in the SCC-certified installation department, and maintains an extensive fleet of equipment through to its own assembly cranes.

AFTER SALE SERVICE

URBAS ENERGIECHNIK ensures that competent technicians are available at all times through its 24/7 service. An extensive spare parts warehouse guarantees the delivery of spare parts at short notice, thus ensuring the highest-possible system availability.



The outstanding expertise of URBAS lies in the combination of planning, manufacturing, assembly and maintenance of biomass energy systems – all from a single source

Energy from biomass

URBAS has been constructing trendsetting energy systems for the intelligent use of biogenic fuels for more than 30 years.

URBAS systems are specially designed for energy recovery from the inhomogeneous fuels that accrue in sawmills and wood-processing plants or in forestry. Special combustion systems are used for the utilisation of recycling wood.

A dedicated research department is permanently engaged in innovations on the topics of ENERGY and BIOMASS.

The realisation of systems for the sustainable use of biogenic fuels in line with economic and ecological criteria – this is the expertise that URBAS offers.



CHP PLANTS

The combined generation of heat and electricity ensures maximum efficiency in the utilisation of biomass fuels. URBAS realises CHP plants with electric power up to 30 MW as biomass steam power plants. Wood gasification technology is used for smaller power outputs (from 150 kW_{el}).

PROCESS STEAM PLANTS

Many production processes in plants in the food, chemical, paper and timber industries require steam of a precisely defined quality and quantity. Whether it is low-pressure or high-pressure steam, URBAS realises sophisticated complete solutions for the widest variety of requirements.



WARM WATER AND HOT WATER PLANTS

To generate hot water for the heat supply of industrial plants or district heating networks, URBAS builds a broad range of boiler systems in the range from 1 MW to 50 MW of fuel thermal output. The spectrum of fuels that can be used is broad, ranging from natural waste wood and bark to used wood from recycling processes. URBAS complete solutions are customised to the requirements of the operator – from the fuel transport and the firing system through to flue gas scrubbing and energy distribution.



CHP PLANTS

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Stora Enso Wood Products Zdirec s.r.o

COUNTRY: Czech Republic
OUTPUT: 28 to/h • 6 MW_{el}
PRESSURE: 78 bar
TEMPERATURE: 540 °C
EXTRACTION: max. 17,800 kW

SPECIAL SOLUTION:

- > Connection to de-barking plant
- > Transport distance 200 m
- > Capacity 300 SRM/h



HIT Holzindustrie Torgau GmbH & Co. KG

COUNTRY: Germany
OUTPUT: 4 x 13 to/h • 2 x 5 MW_{el}
PRESSURE: 32 bar
TEMPERATURE: 520 °C
EXTRACTION: 2 x 16,000 kW



Glennon Brothers Ltd.

COUNTRY: Great Britain
OUTPUT: 13 to/h • 2,5 MW_{el}
PRESSURE: 32 bar
TEMPERATURE: 520 °C
EXTRACTION: 1 x 9,000 kW



CHP PLANTS

Horizon Pulp & Paper Ltd.

COUNTRY: Estonia
OUTPUT: KWK 4.3 MW_{el}
Process steam 30 to/h
PRESSURE: 81 bar
TEMPERATURE: 535 °C
EXTRACTION: 15.5 bar - max. 11 to/h
4.9 bar - max. 28 to/h



SPECIAL SOLUTION:
> Bleeding back-pressure turbine with steam extraction to two steam lines

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Horizon Pulp & Paper produces kraft paper in Kerha, Estonia, for the global market. To supply energy to the production plants, URBAS has realised a biomass power plant with process steam extraction. The turbine exhaust steam supplies two process steam lines with the integration of a 100 m³ steam accumulator. The complete system was realised by URBAS as a turnkey system.





CHP PLANTS

Bioenergy Topolcany s.r.o.

COUNTRY: Slovakia
OUTPUT: 2 x 18 to/h • 8.1 MW_{el}
PRESSURE: 78 bar
TEMPERATURE: 520 °C
EXTRACTION: max. 21,000 kW



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Piveteau Bois Egletons Power Plant

COUNTRY: France
OUTPUT: 20.5 to/h • 3.5 MW_{el}
PRESSURE: 48 bar
TEMPERATURE: 520 °C
EXTRACTION: max. 16,500 kW



Bioenergiezentrum GmbH Liebenfels Power Plant

COUNTRY: Austria
OUTPUT: 28 to/h • 5 MW_{el}
PRESSURE: 78 bar
TEMPERATURE: 540 °C
EXTRACTION: max. 20,000 kW



Moulin Bois Energie

COUNTRY: France
OUTPUT: 14.5 to/h • 3.3 MW_{el}
PRESSURE: 48 bar
TEMPERATURE: 520 °C
EXTRACTION: max. 12,000 kW



Scierie du Limousin

COUNTRY: France
OUTPUT: 18.5 to/h • 3.5 MW_{el}
PRESSURE: 48 bar
TEMPERATURE: 520 °C
EXTRACTION: max. 16,000 kW



Graanul Invest Group Planupes Power Plant

COUNTRY: Latvia
OUTPUT: 20.5 to/h • 4 MW_{el}
PRESSURE: 78 bar
TEMPERATURE: 520 °C
EXTRACTION: max. 14,000 kW





CHP PLANTS

SPECIAL SOLUTION:
> 10,000 m² closed,
sound-insulated
fuel storage and mani-
pulation hall

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**Bioenergiezentrum GmbH
Klagenfurt Ost Power Plant**

COUNTRY: Austria
OUTPUT: 2 x 30 to/h • 11.6 MW_{el}
PRESSURE: 78 bar
TEMPERATURE: 540 °C
EXTRACTION: max. 39,000 kW



**Graanul Invest Group
Imavere Power Plant**

COUNTRY: Estonia
OUTPUT: 2 x 24 to/h • 10 MW_{el}
PRESSURE: 78 bar
TEMPERATURE: 520 °C
EXTRACTION: max. 28,200 kW





PROCESS STEAM PLANTS

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SPECIAL SOLUTION:
> Steam distribution
system with conden-
sate return

Waggeryd Cell AB

COUNTRY: Sweden
OUTPUT: 15 to/h steam
PRESSURE: 24 bar
TEMPERATURE: 224 °C



Pfizer Manufacturing GmbH

COUNTRY: Germany
OUTPUT: 6 to/h steam
PRESSURE: 12 bar
TEMPERATURE: 192 °C



Chauffage Urbain Colmar

COUNTRY: France
OUTPUT: 12 to/h steam
PRESSURE: 12 bar
TEMPERATURE: 192 °C





WARM WATER AND HOT WATER PLANTS

Kelag Energie & Wärme GmbH Völkermarkt Heating Plant

COUNTRY: Austria
OUTPUT: 4,000 kW
TEMPERATURE: 110 °C
PRESSURE: 10 bar



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Eugen Decker Holzindustrie KG

COUNTRY: Germany
OUTPUT: 5,000 kW
TEMPERATURE: 110 °C
PRESSURE: 6 bar



RingAlm AS

COUNTRY: Norway
OUTPUT: 5,000 kW
TEMPERATURE: 110 °C
PRESSURE: 6 bar



S.A.R.L Coge du Cosquer

COUNTRY: France
OUTPUT: 8,000 kW
TEMPERATURE: 150 °C
PRESSURE: 10 bar
PRESSURE: Recycling wood A/B



Stora Enso Wood Products Plana s.r.o

COUNTRY: Czech Republic
OUTPUT: 10,000 kW
+ 8,000 kW
TEMPERATURE: 110 °C
PRESSURE: 6 bar



Scierie Lefebvre SAS

COUNTRY: France
OUTPUT: 8,000 kW
TEMPERATURE: 160 °C
PRESSURE: 10 bar





WARM WATER AND
HOT WATER PLANTS

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SPECIAL SOLUTION:
> Buffer storage tank 150 m³

SCA Timber AB

COUNTRY: Sweden
OUTPUT: 2 x 12,000 kW
+ 12,000 kW oil boiler
Buffer storage tank V=150 m³
TEMPERATURE: 160 °C
PRESSURE: 12 bar



BSW Latvia SIA

COUNTRY: Latvia
OUTPUT: 8,000 kW
TEMPERATURE: 130 °C
PRESSURE: 6 bar



Binderholz Nordic Oy

COUNTRY: Finland
OUTPUT: 10,600 kW
TEMPERATURE: 130 °C
PRESSURE: 10 bar





WARM WATER AND
HOT WATER PLANTS

SPECIAL SOLUTION:
> Plant designed for
conversion to CHP



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Ladenburger GmbH

COUNTRY: Germany
OUTPUT: 10,000 kW
+ 4,000 kW
TEMPERATURE: 120 °C
PRESSURE: 32 bar + 10 bar



**Kelag Energie & Wärme GmbH
Hermagor Heating Plant**

COUNTRY: Austria
OUTPUT: 4,000 kW
TEMPERATURE: 210 °C
PRESSURE: 32 bar



JPJ Wood Oy

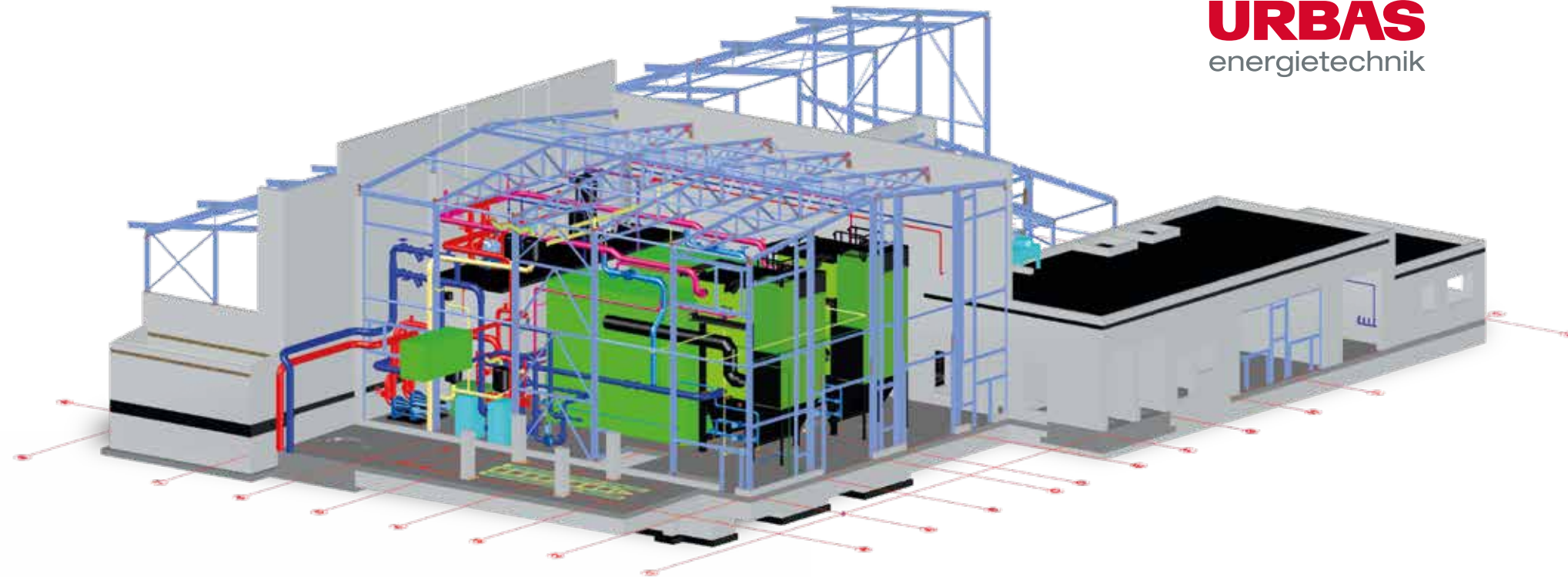
COUNTRY: Finland
OUTPUT: 8,000 kW
TEMPERATURE: 130 °C
PRESSURE: 10 bar





Toplana AD Prijedor

COUNTRY: Bosnia and Herzegovina
OUTPUT: 2 x 10,000 kW
250 kW_{el} wood gas CHP
TEMPERATURE: 110 °C
PRESSURE: 8 bar



In order to reduce the country's dependency on heavy fuel oil imports and promote the use of local biomass resources, a modern biomass combined heat and power plant was constructed in the city of Prijedor (BIH) to supply the local district heating network. The EBRD-financed project was realised by URBAS in record time as an EPC project following an international call for tenders. In addition to the power plant technology, the project also comprised the supply of machines and systems for fuel logistics and fuel treatment.

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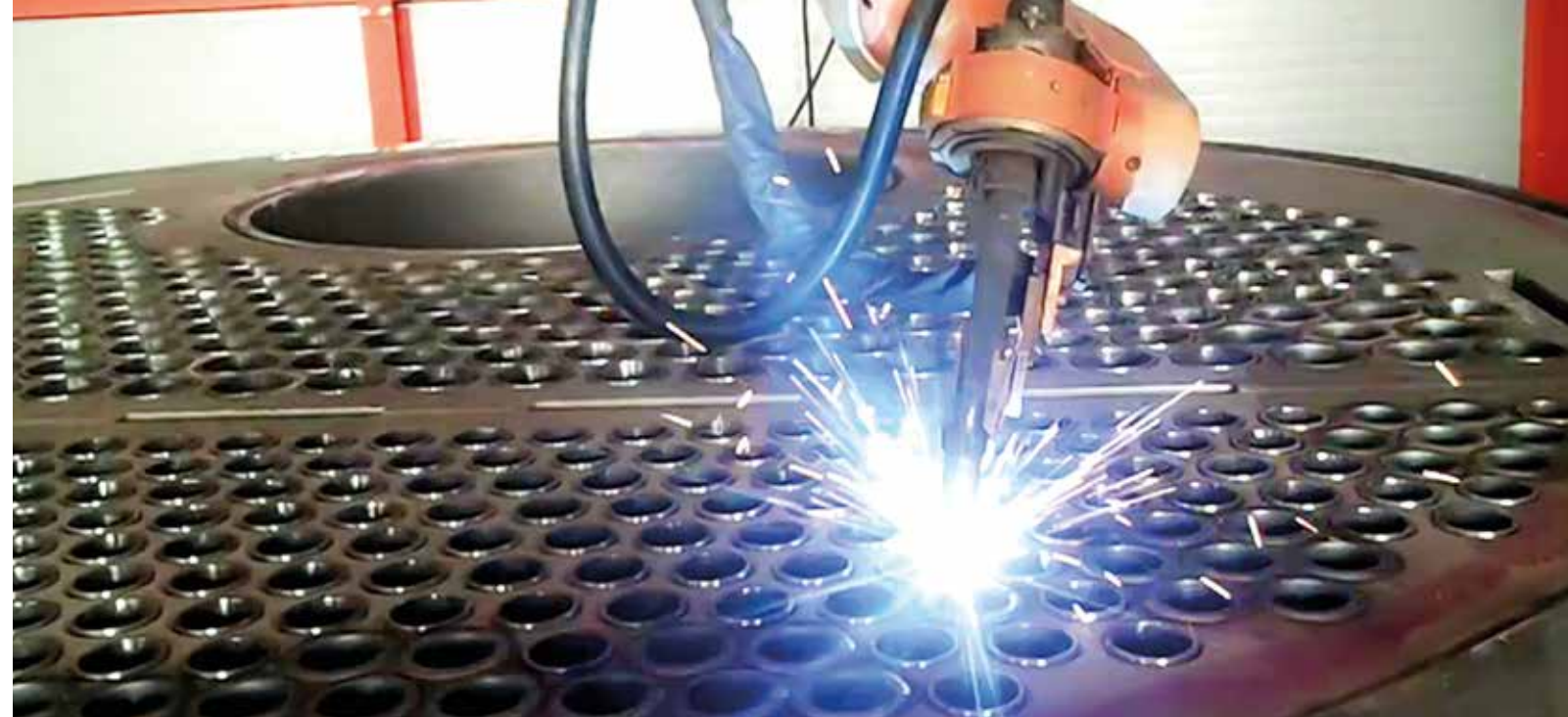
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