



Renewable

Biogas

Landfill gas

Wind energy

Photovoltaics

Experience

Efficiency

Innovation

Pytec

Waste technology
and energy concepts

Renewable

Together with our partners, we plan and build all types of plants for renewable energy use.

Rytec offers a unique combination of innovative engineering and solid experience in plant operation. Our strengths lie in the development, building, optimisation and renovation of energy and waste processing plants.

Together with environmental and economic concerns, our sound engineering knowledge in the production of biogas, biological and thermal waste treatment, energy, waste and landfill process technology are channelled into custom planning and surveys.

We take on plant operation for CHP, fermentation plants, bio-mass power plants and sewage treatment.

Projects



**Biogas energy plant
Flörsheim-Wicker Landfill**

Rytec services

- Concept, planning, construction management and startup of the biogas power plant
- Biogas energy recovery plant operation

Client

Rhein-Main-Deponie GmbH
D-65439 Flörsheim am Main

Project

- Annual capacity: 45,000 tons of separately collected biowaste and green waste: out of these, up to 5,000 tons of liquid biowaste
- Thermophilic dry fermentation in three horizontal concrete fermenters with a volume of 1,300 cubic metres each, Kompogas™ system
- Biogas and Landfill gas are converted in seven gas engines with a power capacity of 5,300 kW_{el}, replacement of decreasing landfill gas amounts
- Production of approximately 10.5 million kWh of electricity per year
- Recovery of 14,000 tons per annum of dry fermentation residue for the production of recultivation materials for the landfill or use as a substrate in the soil decontamination plant, production of compost or combustion in the biomass power plant



**Large PV green field plant
Sehlem Landfill**

Rytec services

- Feasibility study, planning and construction of a photovoltaic plant of approximately 780 kWp

Client

Bernkastel-Wittlich district authority
Waste management operation
D-54518 Bernkastel-Wittlich

Project

- Total power installed: around 780 kW on a surface of 19,000 m²
- Power generation forecasted: 980 kWh/kWp
- Use of thin layer PV modules
- Elevation through a conventional ground mounted system
- Central or string inverter for conversion of direct current into alternating current
- Expansion of the capacity for renewable energy production and the energy mix at the Sehlem location



**Biogas plant
Schöntal-Bieringen**

Rytec services

- Project coordination, planning, construction and startup of the biogas plant

Client

BGP – Biogaspark Neckar-Odenwald GmbH
D-74722 Buchen

Project

- Processing of approximately 20,000 tons of agricultural substrates per year (maize silage, grass silage, clover silage, whole crop silage, sugar beet leaves, liquid manure, solid dung and poultry dung) and up to 20% agricultural waste such as sugar beet pulp, fruit pomace and mash
- Production of 3.5 million cubic metres of biogas per year
- Engine performance installed: 800 kW_{el}
- Providing CHP heat to the industrial client Ziehl-Abegg via a 1,200 metre-long district heating network
- Fermentation residue is reused in agriculture as a fertiliser

At Rytec we are committed to developing the very best solution for our clients – no matter how complex the challenge. We do this with a great deal of personal initiative and in cooperation with clients and specialists. We lead projects to success the world over – for a sustainable future.

You can get more information about our expertise and current project references in printed form at our offices or download them from: www.rytec.com.

Experience

Expert opinions, definition of goals, permits, plant operation

Efficiency

District heating, energy optimisation, ORC, heat storage

Innovation

Thermal recycling, resource efficiency, HTC, wood distillation

Renewable

Biogas, landfill gas, wind energy, photovoltaics



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