



# Drying **BIOMASS FOR ENERGY**

DRYING • COMPONENTS • USES • BENEFITS • SOLUTIONS

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# DRYING BIOMASS FOR ENERGY

Biomass is a highly useful material consisting of renewable resources, such as plants. It has the ability to generate heat and electricity in a manner which is less harmful to the environment.

## BIOMASS COMPONENTS

Biomass is carbon-based and composed of a mixture of organic molecules that contain hydrogen. This renewable resource can include a wide range of materials, including:

- Virgin wood from forestry, arboricultural activities, and wood processing
- Energy crops (high yield crops grown specifically for energy applications)
- Agricultural residues from harvesting and processing
- Manufacturing, preparation, processing, and post-consumer waste from the food and drink industry
- Industrial waste from manufacturing

## USING BIOMASS AS ENERGY

By 2030, almost 680 million dry tons of biomass resources could be made available in the United States each year. These resources would be enough to produce more than 54 billion gallons of ethanol. This would include:

- 45% (~306 million tons) from wood and wood-derived biomass
- 44% (~299 million tons) from biofuels, mainly ethanol
- 11% (~75 million tons) from municipal solid waste (MSW)

# BIOMASS' BENEFITS

- Reduction of carbon dioxide emissions
- Reduces sulfur and mercury emissions
- Lowers operating costs at power plants

# VULCAN DRYING SYSTEMS SOLUTION

Vulcan Drying Systems supplies equipment to dry, sort, and move biomass. Our team can build a dryer to best fit your specific project needs.

Vulcan Drying Systems consist of a drum, burner, and a combustion chamber. After passing through the dryer, dried biomass is discharged onto a transfer conveyor for further sorting and separation. The vapor removed during the process is pulled to a cyclone specifically designed to work with dust. The vapors are then moved on to a high-temperature baghouse, which removes all fine particulates from the vapor stream.

For more information on Vulcan Drying Systems email us at [sales@vulcandryingsystems.com](mailto:sales@vulcandryingsystems.com) or call us at +1 (660) 263-7474.

