

## A Washing Machine's Energy Pathway

If an Energy Snapshot included using a washing machine to wash clothes, not only does the machine use electricity but energy is also used when the water pump in the basement starts up to work to fill the machine. If the clothes are being washed in warm or hot water, the water heater burns heating oil (a fossil fuel) in the furnace to heat up the water. The washing machine came from the appliance store in town and the store received the machine from a washing machine manufacturer. The washing machine was transported to the retail store and the person's home by a delivery truck that burned gasoline or diesel fuel (again a fossil fuel).

How are washing machines made? Washing machines are made up of individual washing machine parts. Some of the parts are made of metal, some are made of plastic. Energy is used in the mining of the raw materials for the metal, in the transport of the raw materials to a steel plant, and in the transport of the sheet metal that the washing machine parts are stamped out of to the manufacturer. The plastic parts such as the control knobs, hoses, and sealants, are made from petroleum. Plastic parts are also made off site, packaged and shipped to the washing machine manufacturing facility. Energy is used to put all of the smaller parts together (sub-assembly) to make bigger parts (assembly) of the washing machine. These activities take place in a washing machine manufacturing facility that requires electricity to light the building and operate the facility, and fuel to heat and cool the facility. Workers drive to and from the washing machine facility. Washing clothes also involves using a detergent.... and so on.

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