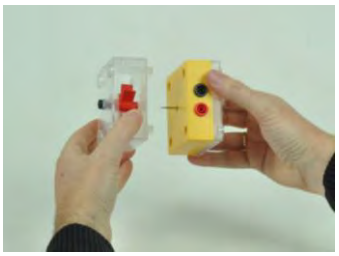
PRINCIPLE OF THERMAL POWER PLANTS

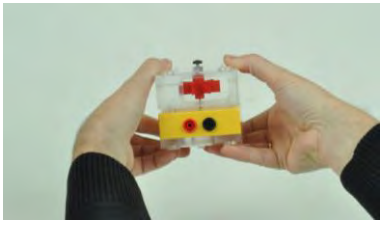
AES 5.1

You might know coal-fired power stations, gas- or oil-fired power plants. Such power plants are known as kaloric power plants or thermal power plants. But where does the electrical energy comes from in these kaloric power plants?

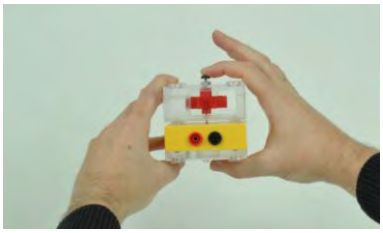
Experiment:



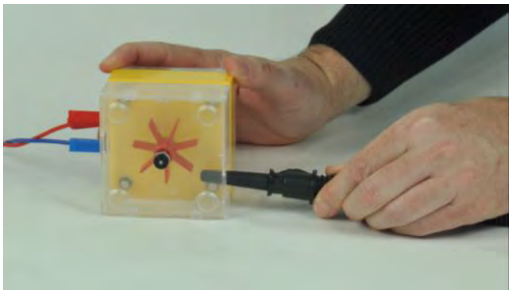
- Place the turbine in housing on the engine/generator brick
- Insert the metal shaft of the engine/generator in the turbine axis



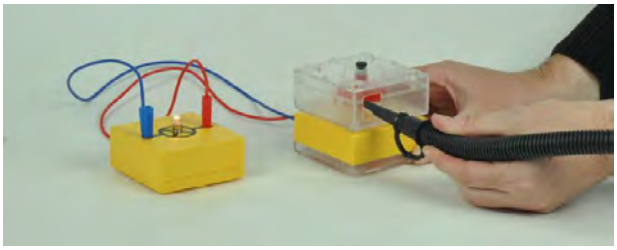
- The 4 plastic bolts of the turbine housing have to stick in the opening of the engine/generator-brick. Stick both bricks together.
- Press the turbine with the black push button on the generator axis



- Check the smooth running of the turbine with your finger
- Screw the lamp 2.5V into the socket of the brick
- Connect both bricks with cables (red and blue, 75cm)



- Place the air pump on the ground next to the table
- Connect the flexible hose with the "pressure"-side of air pump
- Adjust the nozzle of the pressure hose to the turbine housing and onto the center of the "blade surfaces"



- Hold the turbine housing
- An other student assists by pumping

Result:
The air pressure drives the turbine, the lamp starts to glow.

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