

## Model 2 – Water turbine / hydropower

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### Topic

We will be investigating hydropower using a model and learning about alternative types of energy generation in the context of renewable energy.

### Learning objective

- Forms of renewable energy and energy converters. From kinetic energy (hydropower) via mechanical energy (generator) to electrical energy.
- Types of power plants and storing hydropower
- Ecological aspects of using hydropower
- Performance and effectiveness of water turbines
- The practical use of a belt drive as a way to transfer movement or force between gear components that are far apart from one another.

### Time required

45 minutes.