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## River Ness Hydro – Schools Naming Competition

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### What is the River Ness Hydro?

The Highland Council is building a new hydroelectric generator and interactive visitor experience on the River Ness. The generator uses an Archimedes Screw to harness the energy of the water flowing down the River Ness. This will serve as a flagship for the Highland Council's response to climate change. The River Ness Hydro will provide a lot of benefits for Inverness and the region, including:

- Annual generation of over 540,000 kWh, approximately 50% of the electricity demand to the nearby Inverness Leisure Centre.
- Carbon savings of 142,000 kg CO<sub>2</sub>e per annum (the equivalent of flying from London to New York 237 times!!).
- Developing a unique structure with interactive media content that will be fully accessible by the public and serve to enhance the visitor experience.
- Provide a hub for science, technology, engineering and maths (STEM) learning – the Science Skills Academy will be creating activities for the River Ness Hydro so you can see how the STEM subjects you study at school can be applied in the real world.

### What is the Naming Competition?

We want the building and the visitor experience to inspire people. We would like interested pupils to **DESIGN A POSTER** and **THINK UP A NAME** which captures the main themes of the Hydro project: *Sustainability, Renewable Energy, Climate Change and STEM Learning*.

*Instructions for entering:*

- The competition is open to any pupil or group of pupils from a Highland Primary or Secondary School, and after-school or extracurricular clubs can also take part.
- [Watch this video](#) from the [Science Skills Academy](#) which talks about Climate Change and the importance of renewables in ensuring we take better care of the planet.
- Submit a poster which has the name you have chosen for the Hydro scheme. Be sure to include your name, class and school on the back of your submission so we know who did the brilliant artwork! Send your entries to [carbonclever@highland.gov.uk](mailto:carbonclever@highland.gov.uk) by **Friday 5<sup>th</sup> November 2021**.

### What is the prize?

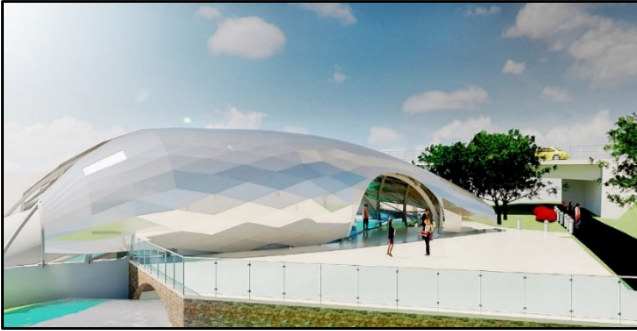
As well as the chance to name a unique, landmark attraction that will operate for 50+ years, the winning class will also get the following prizes:

- Complimentary activity for the entire class provided by Highlife Highland
- Plaque at the scheme with school name and class details to highlight your help in naming our scheme
- 3D model of the Hydro scheme for your class to keep

Additionally, our 10 favourite posters will be placed on-site during the construction of the Hydro to help inform the public and keep our builders inspired.

## Resources

To help you, we have included below some designs of the scheme, some information on hydroelectricity and careers in renewables, and some history on the Archimedes Screw and Hydroelectricity.

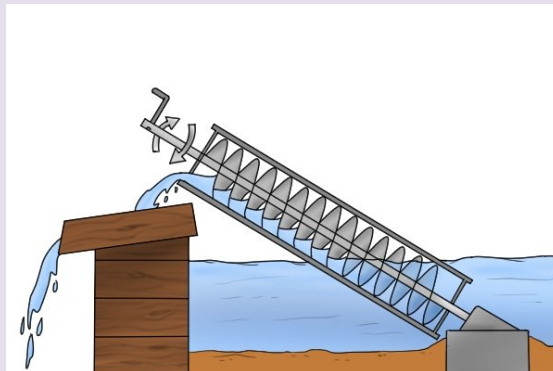


[Watch this video](#) to learn more about Renewables and Hydroelectricity.

Interested in careers in Hydroelectricity and Renewables? [Watch this video](#) for more information.

### What is an Archimedes Screw?

An Archimedes Screw is a type of pump used for raising water up. It typically consists of a screw inside a cylinder. With the bottom end in water, the screw lifts water up to the top, where it pours out of a spout. The screw can be turned by an engine which drives an electric generator, producing electricity. **This is what Highland Council will be delivering.**



This technology is named after Archimedes who is believed to have invented the technology back in ancient Egypt in circa 234 BC. Archimedes was one of the most famous scientists in Ancient Greece and is best known for being a great mathematician. The Archimedes Screw is still much in use all over the world.