



KINETIC HYDRO

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Newsletter 6: Winter 2022

<https://www.linkedin.com/company/kinetic-hydro>

This is the 6th in our regular updates on progress at Kinetic Hydro. We hope that you continue to find these communications interesting, but if you don't want to receive our newsletters please let us know by sending an email to info@kinetic-hydro.com

Anna Robertson joins the team

It is a pleasure to introduce our newest team member, Anna Robertson. Joining in November, she brings enthusiasm and insight as the Commercial Lead to Kinetic Hydro Ltd. She will be implementing the next steps of our start-up journey and will lead market engagement and fundraising activities.

Winning EC9

We have successfully secured a grant of £238K for Energy Catalyst round 9. Our feasibility project starts this January for 12 months. Kinetic Hydro Ltd is the lead on the project with three partners; University of Leicester, Practical action and Challenges Catalyst. The purpose of this project is to determine how feasible it is to use our river turbine to accelerate access to affordable, clean energy services in Uganda and to design a follow-up project (EC10) to demonstrate this in practice in 2024-2025. This will pave the way for future projects to have positive impacts on energy access to poor, rural households in future years. Our EC9 grant will enable us to trial our turbine in the river Ness in Scotland, and for our partners to plan a Ugandan pilot project.



The University will develop satellite data tools to evaluate the available hydro-kinetic resources in Uganda.



This Scottish-African development agency will conduct market assessment and deliver a commercialisation strategy for Uganda.

Practical ACTION

Practical Action will conduct on the ground research and identify the site for our pilot project in 2024.

Pitch Control Turbine

After months of design effort and waiting for component deliveries we were finally ready to build and test our pitch control turbine; firstly in the workshop, and then in the water. No-one has ever implemented pitch control on a turbine of this scale before but after a lot of hard work and a few late nights we have achieved reliable operation and demonstrated how the pitch system can be used to start up and stop the turbine. There's further work to do in implementing the power capping functionality in flood conditions which we will address in our upcoming Energy Catalyst project. As the December ice finally melted we made our way back to Pinkston Watersports with the turbine, our Power Control Electronics enclosure, and the 'mini-grid'. For the first time we demonstrated 'end-to-end' power generation with the turbine controlled with commercial PV electronics exporting electricity to the mini-grid battery that can then power AC loads.

The Pitch Control Turbine on test in the workshop (top) and at Pinkston Watersports (below)



Uganda brokerage visit

Soon after starting her role Anna visited Uganda with an Innovate UK Energy Catalyst brokerage visit. A hectic 5 day schedule of site visits, networking, a forum, receptions and briefings to understand how our river turbine can be adopted into the river Nile in 2024. Connections were made with Mbarara University of Science and Technology, CREEC (Centre for Research in Energy and Energy Conservation) a development organisation Pilot International, Mandulis Energy and various mini grid developers helping us understand the market opportunities in Uganda. We hope to collaborate with some of these organisations on an EC10 application this Spring.

Anna was interviewed for Ugandan National TV at the British High Commissioners residence in Kampala (left)



Pitching showcase at Michelin Scotland Innovation Parc

The MSIP accelerator culminated in an Investor Day, where Donald had the opportunity to pitch to a panel of investment experts. Publicly displaying our turbine for the first time garnered much interest and the pitch feedback will be extremely useful when we go out for investment in the next few months.

Investment opportunities

This quarter we will be launching another equity raise. Please reach out to Donald@kinetic-hydro.com for more information.