

Summary of Blackstairs Q&A session - 2 May 2019

[Q \(Paul\): What is the motivation of starting the cooperation with Dwr Uisce?](#)

Dympna: There is a growing discussion on green energy and climate change. For example, using green energy to prevent climate change. And people are buying in this idea. The collaborations among the project team, Electrical Pump Services (EPS) and NFGWS (National Federation of Group Water Scheme) are deemed to be beneficial to the environment so far.

[Q \(Paul\): How difficult was it to bring laboratory work into practices in reality? What challenges have you encountered?](#)

Aonghus: It would be challenging without the support from the water community such as EPS and NFGWS. Their supports are critical for us being laboratory work to actual practices. More importantly, they fed the project with enthusiasm.

[Q \(Paul\): Will there be potential replication of this HP system?](#)

Barry: Yes, there might be potential replication on pipes(?) and water sources in the North and West regions. The Water Scheme is larger there which potentially means more value. It is a simple idea that the cost will be lower.

[Q \(Paul\): Daniele, can you talk about your journey of moving your research into practices?](#)

Daniele: It is certainly a long journey. I started from studying energy recovery system and designing new technology. Then, I tried to come up with the best solution for testing.

[Q \(Paul\): Based on this new technology, how much work will be involved to replicate it on other sites?](#)

Daniele: We have all the necessary resources and tools ready for replication. These resources and tools play a critical role in assisting a new design which accommodates the different conditions of the water sites.

Q: how long can this HP system last?

Aonghus: It can last around 20 years or more. Some maintenance is also required.

Q: Can we use some standardised kits?

Aonghus: Yes, some minor modification is needed. The modification depends on the context.

Q: How to maintain the efficiency of the PAT system without losing some energy (?)?

Aonghus: ... a 3 X 6-inch pipe can produce 2.5 kW energy.....

Q: I think it might be very beneficial if the public section is also involved. Have you contacted Irish Water?

Aonghus: We did contact Irish Water network at the beginning. However, they had some hesitation on the implementation. But we hope to get more (attention or attraction?) from them in the future.

Q: What are other potentials of this PAT (Pump As Turbine) system? Can it be used in households?

Aonghus: There are more significant potentials lying in the public sector. The efficiency of implementing the PAT system in households is relatively low.

Q (Barry): How do you see the design of this technology been implemented on water sites? Is it too early?

Aonghus: We try to avoid any opportunities for wasting energy. Although it has not been (able to?) implemented worldwide. We see this technology as an encouragement to start thinking of producing RE (renewable energy) and avoid wasting energy.

Concluding remarks (Paul): Through this project, we are trying to set up a collaborative mindset. We value every small opportunity which can create value and try to multiply that.