



Dŵr Uisce

Energy Recovery in Water Services
Adennill Ynni yn y Diwydiant Dŵr

NEWSLETTER

02 June 2020



"Future

might seem to be a bit of uncertain to you, lately.
In this edition, we look to the future with you.

Úsáid an t-uisce arís
Fág babhla nó buicéad faoin sconná fad agus atá tú ag fanacht
a bhailítear a úsáid chun an leithreas a shruithiú, uisce a chur arís

Nigh na soithí ar bhealach nach ndéanfaidh dochar do
An bhfuil miasniteoir agat? Ginnigh go bhfuil sé lán gach uair a úsáidtear
céanna uisce agus d'úsáidfeá dá nifeá na soithí le lámh.

Bain sult as uisce breá fuar ó chrúiscín a
Ní bheir fuar a T

do chithfholctha
r uisce in aghaidh an
fholctha de ghnáth.
níos giorra agat agus

conna ar siúl
20 lítear uisce a spáráil agus tú
tácla agus do do bearradh féin.

SPÁRÁIL UISCE

Bí cliste s
Cuir uisce ar
sa tráthnóna
ghal agus n

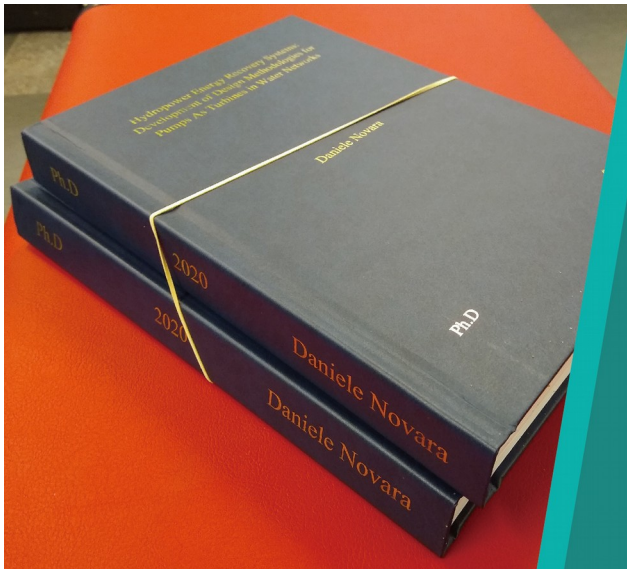
Earraí a spáráilann uisce
Úsáid sconnai aeraithe, is fiú leithreas a bhfuil sruth iséal i gceist leis a fháil, roghnaigh sconnai cithfholcáin e
roghnaigh miasniteoir agus inneall níocháin le lipéad A+ chun go leor uisce a spáráil.

Inneall níocháin & miasniteoir atá lán
Ná cas ar siúl an miasniteoir ná an t-inneall níocháin
siad lán. Is ionann na hualaigh leathlonta sin agus

Stay at Home! (but conserve water and energy where you can)

Over the past several weeks, we have all been adjusting to working from home and limiting our movements to occasional outings for grocery shopping or medical appointments. This has been a challenge for everyone, but collectively the positive impact has helped manage this pandemic and the spread of COVID-19. Increased water and energy consumption at home translated higher bills for us as consumers. Here, we want to share ways that can support water savings, and in doing so you have win-wins through saving energy too!

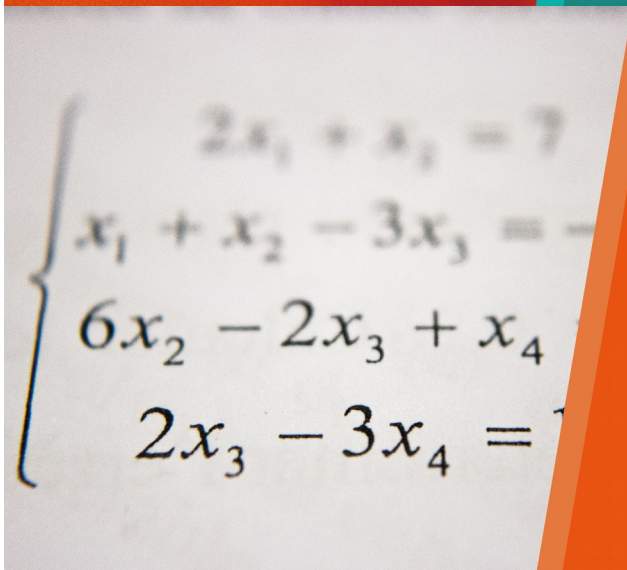
[Read more...](#)



Moving Forward: PhD Completion and Micro-hydropower System Operation

Our researcher from Trinity College Dublin - Daniele Novara, has been recently awarded with a PhD degree at the end of a three-year-long research journey. The subject of the dissertation was the development of design guidelines for Pumps-as-turbines in water conduits developed via desk studies and lab experiments, which culminated in the construction of the two demonstration sites of Micro-hydropower Energy Recovery System. These sites are being continuously monitored, and the Irish turbine alone as of March 2020 had generated over 10,300 kWh since its startup which is equivalent to the yearly consumption of 2.5 average Irish households.

[Read more...](#)



Modelling of Sewer Wastewater Temperature Dynamics

The heat recovery from wastewater depends upon its flow and temperature in the sewer system. The wastewater temperature in sewer system changes across the longitudinal profile of sewer line because of heat losses and addition of lateral flows. The modelling of wastewater temperature dynamics can provide us insight into the true potential of heat recovery from sewer wastewater and help to determine the optimal location for installation of heat recovery system. This article reviews some existing model for wastewater temperature dynamics modelling and reflect upon the future work of our project within this context.

[Read more...](#)

Future Maintenance of Pumps as Turbines

Factors associated with the application of pump-as-turbines in micro-hydroelectric power generation are extensively covered in literature. The main ones being its cost effectiveness and simplicity. Reliability should be one of the factors considered in the application of PATs, but it has little coverage in literature. It is driven by the maintenance strategy in place. Predictive maintenance is one such strategy and its useful in maximising the operating times as it focuses in forecasting faults before they occurs. This helping maintenance activities to be scheduled at the most opportune time, hence avoiding unplanned failures and shutdowns.

[Read more...](#)



The Place of Drain Water Heat Recovery in the Future Heating Landscape

The research, and pilot studies, performed by the DWR-UISCe project, show that heat recovery from drain and wastewater can find its place in the future energy landscape in three different ways, under three different operating conditions:

1. As an energy efficiency measure.
2. As an efficiency boost for individual heat pump systems.
3. As a heat source for heating networks

[Read more...](#)

JOIN (OR RECOMMEND) THE DWR UISCE WATER SPECIALISATION CLUSTER



Join us!

Are you a company, a consultant, a university, a scientist interested in saving water and energy? Are you in one of the regions in Ireland or Wales covered by the [INTERREG funding initiative](#):

- Ireland - Carlow /Cork /Dublin City /Dun Laoghaire / Rathdown / Fingal /Kerry /Kildare /Kilkenny /Meath /South Dublin /Tipperary/Waterford /Wexford / Wicklow
- Wales - Carmarthenshire /Ceredigion /Conwy / Denbighshire/ Flintshire / Gwynedd /Isle of Anglesey / Pembrokeshire /Swansea / Wrexham

You may be eligible to join our [SMART SPECIALISATION CLUSTER](#) and benefit from a range of services we offer. [Click here](#) for more information.

BUSINESS SUPPORT

Let us help you to reduce your
water and energy costs.
For free!



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Our aim is to support your business in saving water, energy, emissions and money, and thus making it more resilient for the future. We are a team from Trinity College Dublin and Bangor University, Wales, experienced in working with industry.

**We offer a minimum of six hours
free consultation time to:**

- Measure your current water and related energy use
- Identify opportunities to reduce your water and energy consumption
- Propose cost-effective solutions
- Advise on how to improve your environmental footprint, both in your business and along your supply and demand chains

The free consultation we offer only involves a little time from your side - no financial investment is required.

Participation qualifies you to become part of the DŴR UISCE network with the opportunity to link and learn from similarly-challenged businesses. You will hear about technology choices, cost and carbon savings, avoid the mistakes others have made and connect with trusted suppliers.

**Send us an informal request and
start benefitting from our
expertise, our support and our
network.**

Email: admin@dwr-uisce.eu
Phone: +44 (0) 1248 38 3219 (Bangor)
+353 (0) 1 896 1311 (Dublin)
Web: www.dwr-uisce.eu/business-support



DŴR UISCE stands for Distributing our Water Resources: Utilising Integrated, Smart and Low-Carbon Energy. The project is contributing to improving the long-term sustainability of water supply, treatment and end-use in Ireland and Wales. DŴR UISCE is funded by the European Regional Development Fund through the Ireland-Wales Cooperation programme.

CONNECT WITH US

All project updates, progress, activities and events are posted regularly and shared widely on our [@Dwr_Uisce](https://twitter.com/Dwr_Uisce) Twitter account.

Follow also the hashtags: [#Dwruisce](https://twitter.com/hashtag/Dwruisce).

You can read more on our latest news @ our [Updates](#) section. Sign up for our newsletter [here](#).



Funding agency:



The DŴr Uisce project is part funded by the ERDF Interreg Ireland-Wales Programme 2014-2020

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