



Iascach Intíre Éireann  
Inland Fisheries Ireland

**S** P O T L I G H T  
series

Embracing innovation for good



## Embracing innovation for good

"We have a headstart when it comes to innovation," explains Suzanne Campion, Head of Business Development and Chair of the Innovation Working Group with Inland Fisheries Ireland, (pictured above), "because it's in our culture: for us, it's always been important to us to stay fresh and work in new ways, because not only does it mean we provide a better service, but we have evidence of how it makes us more sustainable – and cost effective."

### Innovation for broad benefit

As a public sector organisation, Inland Fisheries Ireland is in the enviable position of being able to directly impact fish and habitats, and also a broad range of stakeholders, from the 327,000 anglers in Ireland, commercial fishermen, fisheries owners, politicians and councillors, to the general public. Because its impact is so important and so wide-ranging, the organisation places particular focus on

innovation, with the Innovation Working Group bringing people together on projects from across the organisation, at times also collaborating with other bodies.

Inland Fisheries Ireland is developing its innovation strategy, with input from staff right across the state agency. As part of this, it has opened up an Ideas Bank, encouraging staff to submit or 'deposit' their ideas. "When we put a call out internally for ideas, we will have submissions back almost immediately which is a great sign," remarks Suzanne. "Some ideas from staff are submitted as part of a competition and these are reviewed and could be put forward for external funding or internal piloting."

The projects that follow are just two that showcase Inland Fisheries Ireland's innovative outlook and delivery.



Iascach Intíre Éireann  
Inland Fisheries Ireland



**"We are cutting down on our energy use, our carbon footprint and our costs."**  
Thomas McGrory of Inland Fisheries Ireland



From left to right:

Thomas McGrory of Inland Fisheries Ireland,  
Cian O'Flaherty of Safeility and Joe Borza of Energy Elephant.



## Project: Reducing Energy, Carbon and Costs

Thomas McGrory, Energy Officer with Inland Fisheries Ireland, (pictured above), explains the background to a hugely innovative project that started delivering real benefits from the 'go-live' date. "We take the part we have to play in the government's Climate Action Plan very seriously, which gives Ireland's public services a target of achieving a year-on-year 7% reduction in greenhouse gas emissions by 2030."

This 2030 carbon reduction target is a collective target, to reduce CO<sub>2</sub>eq. (carbon dioxide equivalent) by 51% and improve energy efficiency by 50% by 2030. The ultimate goal is to achieve carbon neutrality by 2050. With Inland Fisheries Ireland buildings dispersed around the country using gas, electricity and kerosene, and meter readings having to be taken manually, there was no easy way for the organisation to track progress against this target.

"We decided to turn this gap in our knowledge into a huge opportunity," Thomas enthuses, "and partnered with Energy Elephant, a company which developed an intelligent energy management platform for us. We put in the legwork to gather a considerable amount of historical energy usage data, so that we had a baseline from which we can measure progress. With great support and a grant of €36,400 from the Public Service Innovation Fund, that contributed to the hardware, software and maintenance costs of our new platform, we

now have a live dashboard that shows us in real time how much energy we are using, and on which sites."

The platform immediately made it clear where the energy blackspots were: sites with old boilers, single-glazed windows and poor insulation, for example. "Armed with the data, we could then put forward a business case for remedial action on these sites. We have carried out many upgrades, and the platform has a 'register of opportunity' on which managers can indicate the upgrades that would benefit their site and track progress on these."

The platform displays the improvements in real time and the figures speak for themselves. "For example, one of our properties used 18,473 kWh in 2017, however following energy-saving improvements its energy usage is now some 60% lower," observes Thomas.

"And not only are we fixing underlying structural issues, but we have solar (Photo Voltaic) panels and batteries in place too; across 12 sites we have generated almost 240,000 kWh of solar energy to date. A further seven sites will be completed in the short-term."

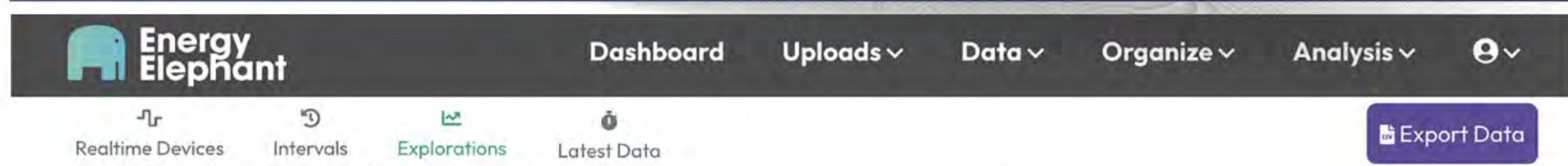
"The payback is fantastic: we are cutting down our energy use, our carbon footprint and our costs. It is motivating and empowering local teams to make important changes and see immediate benefits."



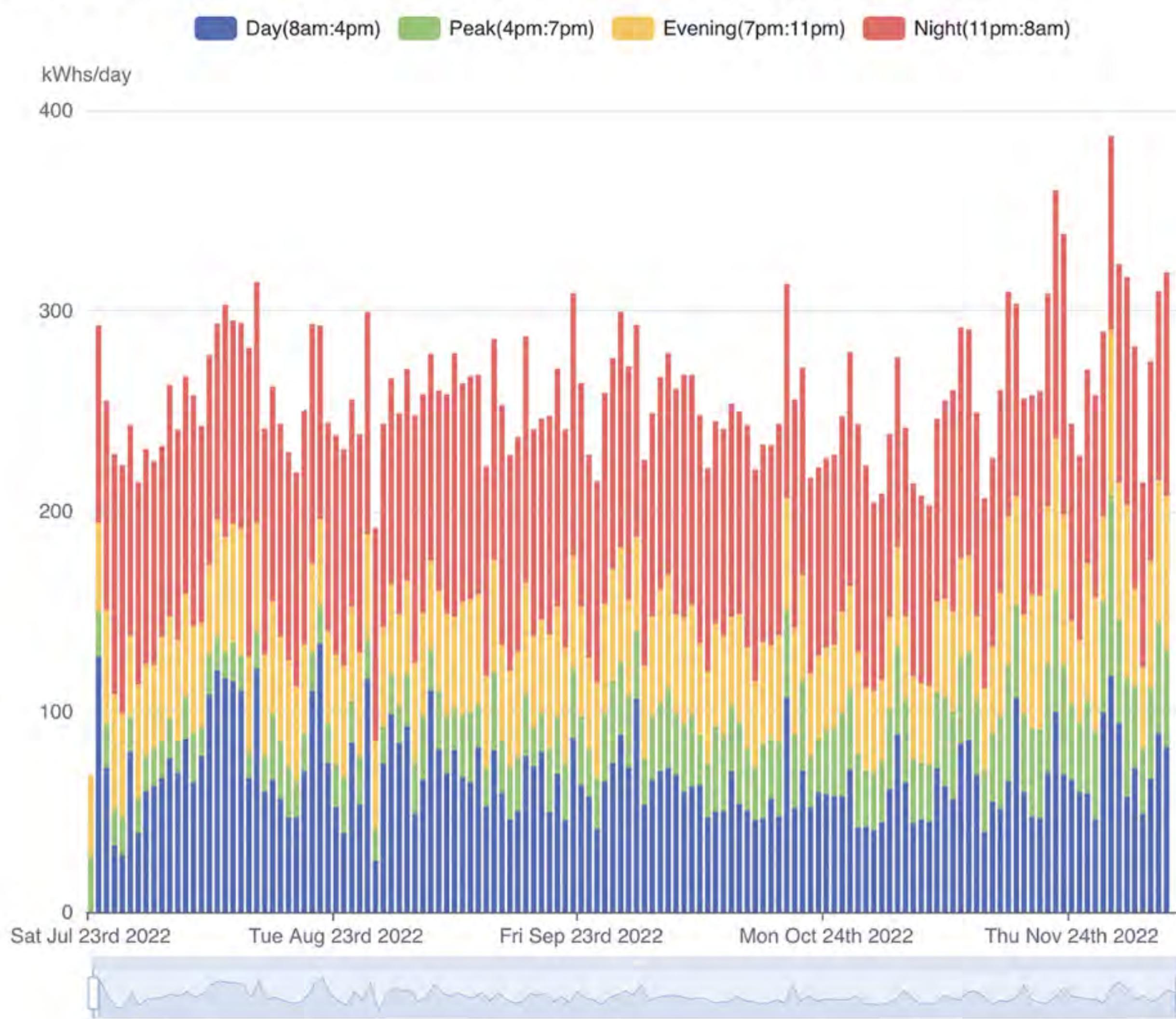
Iascach Intíre Éireann  
Inland Fisheries Ireland



**Insight:** this graph from the Energy Elephant dashboard shows the daily usage in real-time in kWh use, covering daytime (8am – 4pm), peak-time (4pm – 7pm) and evening-time (7pm – 11pm). This data gives building managers an insight into where energy usage can be reduced.



## Daily Usage For Meter Point: City West



**Opportunities:** this graph from Energy Elephant displays the Energy Opportunities Register built into the platform. Property managers can plan efficiency measures, onsite renewables, time of use controls and plan for setting up Green Teams, awareness campaigns and in house communication.

### Opportunities Register ▾

There are hundreds of opportunities for you to consider for reducing carbon emissions, energy waste and costs. You should plan to take many *small steps and giant leaps* to get to your objectives and targets.

This register helps you to review and track the options to improve this site at a high level. It makes it easy for you to track the sustainability projects under consideration and to share this knowledge across teams. It may also inspire you to consider projects you have not come across before.



[Export Data](#)

#### 1. Efficiency >

#### 2. Renewables >

#### 3. Time Of Use - Control >

#### 4. Storage >

#### 5. Behaviour >



Iascach Intíre Éireann  
Inland Fisheries Ireland



## Project: Enhancing data transfer and increasing staff safety

The use of radio telemetry stations to survey fish movements on the Owenriff and Erriff river systems was causing challenges: replacing their heavy 30kg batteries every few weeks was a struggle for staff who had to carry out this task in remote locations, at times in poor weather.

A solution was found in the shape of the installation of a solar PV panel at each station to provide a constant supply of power to the battery. Staff no longer need to travel to replace the batteries regularly, which eliminates this travel time and reduces their carbon footprint, and also avoids them having to carry heavy weights across sometimes challenging terrain. The stations were meanwhile enhanced with SIM cards fitted to the data loggers, giving researchers remote access to information.



Radio Telemetry

Examples of Inland Fisheries Ireland buildings which use solar (Photo Voltaic) panels to generate electricity.



Iascach Intíre Éireann  
Inland Fisheries Ireland





**"We're still at the tip of the innovation iceberg,"**  
Suzanne Campion of Inland Fisheries Ireland



Inland Fisheries Ireland  
staff on patrol with  
their e-bikes

## Looking to the future

Inland Fisheries Ireland has already adapted their ways of working and will continue to build on these, from their fleet of 45 electric vehicles to their use of unmanned drones, e-bikes and also kayaks to better patrol and survey habitats.

"We're still at the tip of the innovation iceberg, so there's lots more to come," says Suzanne. "I'm excited about the potential of the Bradán (salmon) project that will digitise salmon licences and logbooks to make it easier for anglers to access them and for us to record and administer them. A big data project is also under discussion to gather centrally and analyse the ongoing data we are collecting on water temperature, weather, dissolved oxygen levels, chlorophyll a, flow and the records from our data buoys on Lough Sheelin and Lough Curran."

While acknowledging the regulatory constraints in Inland Fisheries Ireland's arena, the workforce of Inland Fisheries Ireland has the inspiration, skills and pedigree to continue to help the work in innovative ways to help them manage, protect and conserve Ireland's fish and habitats.

For more on the work of Inland Fisheries Ireland, please visit [www.FisheriesIreland.ie](http://www.FisheriesIreland.ie)



Iascach Intíre Éireann  
Inland Fisheries Ireland

