



Body

FACT SHEET | ELYSIA

MAKING SOLAR ENERGY BILLING SIMPLER

Repowering London is one of the UK's most experienced community energy development organisations, supporting a family of local solar co-operatives spread across London. As part of this support, we offer solar asset management, maintenance, and billing services. This reduces the administrative burden on the co-ops and allows them to concentrate on delivering the frontline impact and engagement that will drive community energy forward.

Addressing admin challenges

Effective solar billing for community energy isn't a simple process. It often relies on a spreadsheet-based system that is prone to error, hard to scale, and lacks transparency. Repowering London has tackled this by developing Elysia, an open-source software project specifically designed to address the challenges of managing meter reading and billing for community energy sites.

Elysia: benefits in brief



Reduces errors by automating meter reading collection and billing



Open-source and adaptable, so it's free to use and can be customised to meet your co-op's needs



Improves transparency with a centralised database and standardised processes that make data easier to audit and share



Designed to handle diverse solar projects and grow with community needs

How Elysia evolved

We began by identifying the limitations of our own standard spreadsheet system. Then we moved forward in two stages:

Proof of concept

We standardised how we describe solar site components and built a relational database to handle all project variations. The resulting tool automated meter reading downloads and billing calculations. Importantly, it was designed to manage even complex tariffs such as matching and capped arrangements, and legacy Feed-in Tariffs (FiTs). We also built a user-friendly front end that allowed us to test and refine the system.



Elysia has made life a lot easier. We can access all billing information in one place and raise invoices accordingly for each site. It also carries forward information from one quarter to the next, making the process much more efficient, and provides details of how much savings the customer has made each quarter.

– Sharmin Chowdhury, Finance Officer, Repowering London



Shared digital tools such as Elysia will allow community energy groups to fulfill their promise in helping the UK to meet its net zero and energy affordability targets.

Product development

Next, we added the complexity that comes with a community-owned solar installation. This included accounting for half-hourly meter readings and automated validation and billing. The resulting tool has now replaced Repowering London's legacy billing system, making a real difference and proving Elysia's potential.

Impact in prospect

The UK Government's Community Energy Strategy forecasts that community energy could supply power to more than one million homes within the next decade. But this potential will only be realised if the right infrastructure and support are in place. Shared digital tools such as Elysia will allow community energy groups to break free from inefficient or ill-fitting systems and manual processes, allowing them to fulfill their promise in helping the UK to meet its net zero and energy affordability targets.

Would Elysia be useful for your community energy organisation? To learn more or be kept up to date on its development, email mike.hayden@repowering.org.uk