**Salford CVS Annual Conference**

**30th October 2024**

**Salford Community Stadium**

Afternoon workshop: Harnessing Community Energy

Number of attendees: **13**

Facilitator: **Michelle Warburton, Salford CVS**

Panel members: **Ali Abbas – GM Community Renewables; Alison Brittle – Saddleworth Hydro; John Corrigan –Diocese of Salford**

Panel speaker notes: **Karl Chisipochinyi**

**Ali Abbas - GM Community Renewables**

I’m part of a community-led renewable energy project that raises funds through community shares, allowing local people to invest in sustainable energy while earning up to 5% returns. We use this investment to install solar panels on schools, where the generated electricity directly supports the school’s energy needs. When the panels produce excess power, we sell it to schools and community centres at a reduced rate, generating revenue to maintain the panels for up to three years. Over the last 7-8 years, we’ve raised approximately £750,000 across 28 projects, with the first installation in 2015. That initial project benefited from a guaranteed fuel tariff, which gave us a financial boost to build momentum.

Our work goes beyond energy generation; it contributes to significant environmental and financial savings. For example, our projects have produced over 2,000 MWh - enough energy for 100 million cups of tea, and saved 740 tons of carbon emissions, equivalent to over 3.7 million miles driven by a petrol car. These efforts have saved our partners £184,000 in energy costs and contributed £60,000 to a community fund. Ultimately, our goal is to build a self-sustaining model that benefits schools, community members, and the environment alike.

**Alison Brittle - Saddleworth Hydro**

My work involves a sustainable energy initiative located in Greater Manchester, specifically at a turbine house near a large dam. Our setup generates enough power for around 120 homes and has a strong community-driven mission. Profits from energy generation are reinvested locally, particularly in projects that benefit areas facing economic challenges. Initially, this project was motivated by local interest in renewable energy back in 2008. Although plans for a nearby wind farm fell through, we saw an opportunity to make use of the abundant water resources in our area.

A small group gathered our expertise in finance, engineering, and legal fields to form a team, with the support from local councillors and residents. We eventually received a sizable EU grant that covered half of the project’s cost, while the remaining funds came from community shareholders. This setup now includes 173 shareholders who invested a minimum of £250 each, with about two-thirds residing in the local area. After navigating many challenges, including gaining permissions from local utilities, we launched the project in August 2014. Volunteers now maintain the turbine, and we’ve built a team of seven directors who work collaboratively to ensure its success. This project is about more than just energy, it's about building trust and fostering community-driven progress in renewable energy.

**John Corrigan - Diocese of Salford**

I’m the Director of Comparative Facilities Management for the Diocese of Salford, where we’re driving sustainability in our schools through renewable energy projects. In late 2022, we secured capital funding to enhance the energy efficiency of our schools and installed solar panels across 160 sites. Our current solar capacity is about two megawatts, and we’re continuously exploring additional options to reduce our carbon footprint, like passive glassing (highly efficient glazing that conserves energy) and air source heat pumps.

Our pilot school recently tested a 100-kilowatt solar array combined with an air source heat pump, aiming to both generate electricity and produce hot water. The initial results are promising, and we’re now considering similar setups across our network. Moving to fully electric systems from gas, however, this requires extensive electrical upgrades in many schools, and some buildings still need structural improvements before we can scale up these technologies effectively. Since launching, our sustainability initiatives have saved schools around £337,500 and avoided 1,500 tons of CO₂, equivalent to planting 800 trees.

Beyond energy savings, this program represents a cultural shift toward sustainable practices within our schools. We’re now collaborating with partners, like Scottish Energy, to expand our impact. With 127 solar PV arrays installed to date, we’re on a path to reach carbon neutrality, leveraging initial government funding to build a foundation for continued progress across our 200 schools.

**Q&A**

**Question on solar panels:**

**Ali -** We initially thought solar panels would be ideal everywhere, but not all older buildings are suitable. To address this, we’ve funded surveys to identify each building’s best energy-saving options, as solar panels can be costly and aren’t always the most efficient choice. In many cases, simple adjustments like improving lighting controls, ensuring doors stay closed, and selectively heating areas are more effective investments. This approach helps make buildings more energy-efficient before we consider larger interventions like solar.

**John -** I fully agree with prioritizing immediate savings, and solar PV does that by reducing electricity purchases. But we face challenges, especially with schools, which are often empty during peak solar generation times—weekends and holidays, especially in summer. Batteries could store this excess energy, but their cost and lifespan are issues. Ideally, we’d like to use our surplus energy across the parish estate, using the infrastructure we already share. If we could transfer generated energy to other diocese sites, like from a church to a school, it would be a game changer. Currently, without a system to distribute this power internally, we’re limited to selling back to the grid, which doesn’t provide the best return.

**Question on Vacuum Glass Lifecycle**

**A:** Vacuum glass is designed to last at least 25 years, with even longer life if maintained well. Its efficiency is in its structure - two thin glass panes with tiny pillars between them and a vacuum in the middle, which greatly improves its insulation (U-value). Though still in its early stages, we’re working on two pilot projects with Manchester Innovation to rigorously monitor and measure its performance.

**Question on Government Support for Solar Energy**

**A:** About 18 years ago, small-scale solar was financially rewarding due to support for selling excess energy back to the grid. However, government support has significantly reduced, and policies now favour larger energy companies. This makes it harder for individuals and small groups to benefit as much from solar installations.

**Question on GB Energy’s Role in Community Energy Projects**

**Ali -**There’s a push for greater community involvement in the energy system. Community-led initiatives mean we control assets locally, benefiting the community rather than corporate shareholders. The more community groups own their energy projects, the more directly invested they feel in the results, creating a stronger sense of ownership.

**Alison -** Electricity North West supports community energy initiatives because decentralized production reduces the need for costly infrastructure, especially as demand grows with more people charging electric vehicles. Having locally generated power helps distribute the load more evenly.

**John -** A great example is planning for peak usage on days like December 20th, when demand is highest. Infrastructure, especially cabling, has to handle maximum loads, so any upgrades must ensure that we have sufficient capacity to meet peak demand. Improving our energy supply and infrastructure in schools is a priority, but it’s challenging given the limitations of the existing setup.

**John -** We’ve been exploring how to use our school and parish sites as locations for car charging stations, specifically for areas lacking convenient access to chargers. Our goal is to set up infrastructure that helps the community transition to electric vehicles, particularly in places where grid access might be limited. By leveraging these shared spaces, we can provide charging options that aren’t always readily available in every neighbourhood. This approach could also help reduce strain on the grid during peak hours, as more distributed charging points would balance out energy demand.

**Question: Would it be cheaper to charge at less busy times, like December 23rd, when there’s less traffic?**

**Alison -** Timing can be crucial, yes, and we should indeed consider the impact of peak and off-peak charging. But we also need to look at unintended uses - situations where people might leave their vehicles at a charging station for extended periods. For example, someone could park their car at a scenic spot, plug in, and then go off for a long hike, effectively occupying the charger for hours. This might reduce availability for others, particularly in high-demand areas. It’s essential to implement policies or features that manage this effectively to prevent misuse and ensure fair access for everyone.

**John -** To manage extended use, we’re considering setting up an app-based notification system. This app could alert drivers when their car is fully charged, giving them a 30-minute grace period to retrieve it before incurring additional fees. The charging session would also stop once the car is full, so there’s no risk of battery overload or wasted electricity. This way, drivers have a clear prompt to move their cars when they’re done charging, which should encourage shorter and more efficient charging sessions. It’s part of our effort to balance accessibility with fair use.

**Question: Who is responsible for energy initiatives—local or national government?**

**Ali –** We are open to working with any level of government to push these initiatives forward. Our goal is to support projects that address local energy needs, regardless of which party or administration is in place. But community energy projects, particularly solar and other renewable initiatives, have complex governance requirements. You need clear permissions to use shared spaces like roofs, reliable grid connections to prevent overload, and planning permissions to ensure the project is sustainable. Additionally, some grids aren’t yet capable of accepting energy back, so not every area is suited for energy generation. Collaborative planning is key to overcoming these logistical hurdles.

**Question: Should we approach energy projects collectively rather than individually?**

**Audience Member -** I believe partnership and collective effort add immense value, particularly when working in community energy. Collective action also bolsters our credibility and expands the reach and sustainability of our projects. For example, we could look at forming a cooperative for community energy, pooling resources to benefit from economies of scale. Unlike corporate-driven energy initiatives that focus on maximizing shareholder profits, community-driven energy collectives could reinvest earnings back into the community, ensuring a more equitable energy landscape. By working together, we maximize impact and help all partners feel a shared sense of ownership and achievement.

**Gaddum -** One of the biggest challenges is the difference in resources between organisations. Gaddum was fortunate to have made sound investments over the years, which has given us a stronger financial footing. However, smaller community groups, which may not have the same resources, shouldn’t be expected to meet the same financial commitments. If larger organisations could support smaller ones financially or share resources, we could all work toward shared sustainability goals, like becoming carbon neutral. This could look like funding partnerships, shared spaces, or mentorship programs. A resource-sharing model would foster equality within the sector and make meaningful contributions to smaller organizations that lack access to investment.

**Michelle -** Salford has a remarkable culture of partnership, which sets it apart. I travel 54 miles each day to work here because I appreciate this “can do” attitude. There’s genuine enthusiasm for collaboration, with local partners willing to take risks and try innovative approaches. Salford CVS is actively working with local authorities to identify how we can use our unique strengths to address the community’s challenges. Currently, we’re in discussions with senior leaders to explore how our sector can offer solutions that truly benefit residents. This initiative shows how partnership can not only foster innovative solutions but also empower the community by pooling diverse resources and perspectives.

I appreciate the focus on helping smaller organisations and individuals, the “little man.” Too often, when large organisations find success, they forget others and “pull the ladder up behind them.” This is frustrating, especially for those of us committed to helping smaller, less-resourced groups. It’s crucial to involve people directly, bringing them into conversations, educating them, and empowering them to participate. Many people, including myself, aren’t scientists or energy experts, so it’s essential to share knowledge and show them real, tangible examples. Larger organisations need to pledge support for individuals and smaller groups, equipping them with the skills and information needed to make a meaningful impact in their communities.

**Michelle -** I completely agree. There’s something powerful about responses rooted in passion and lived experience. Our work can’t just be professionals talking among themselves, it needs to include those we’re trying to help, ensuring we’re addressing their actual needs. Engaging community members isn’t just a box to tick; it’s essential for achieving real change. When people feel included and informed, they’re more likely to support and engage with initiatives, creating a foundation for sustainable change. We’re committed to making sure that the work we do involves those who will be most impacted, creating a space where their voices are not only heard but shape the path forward.