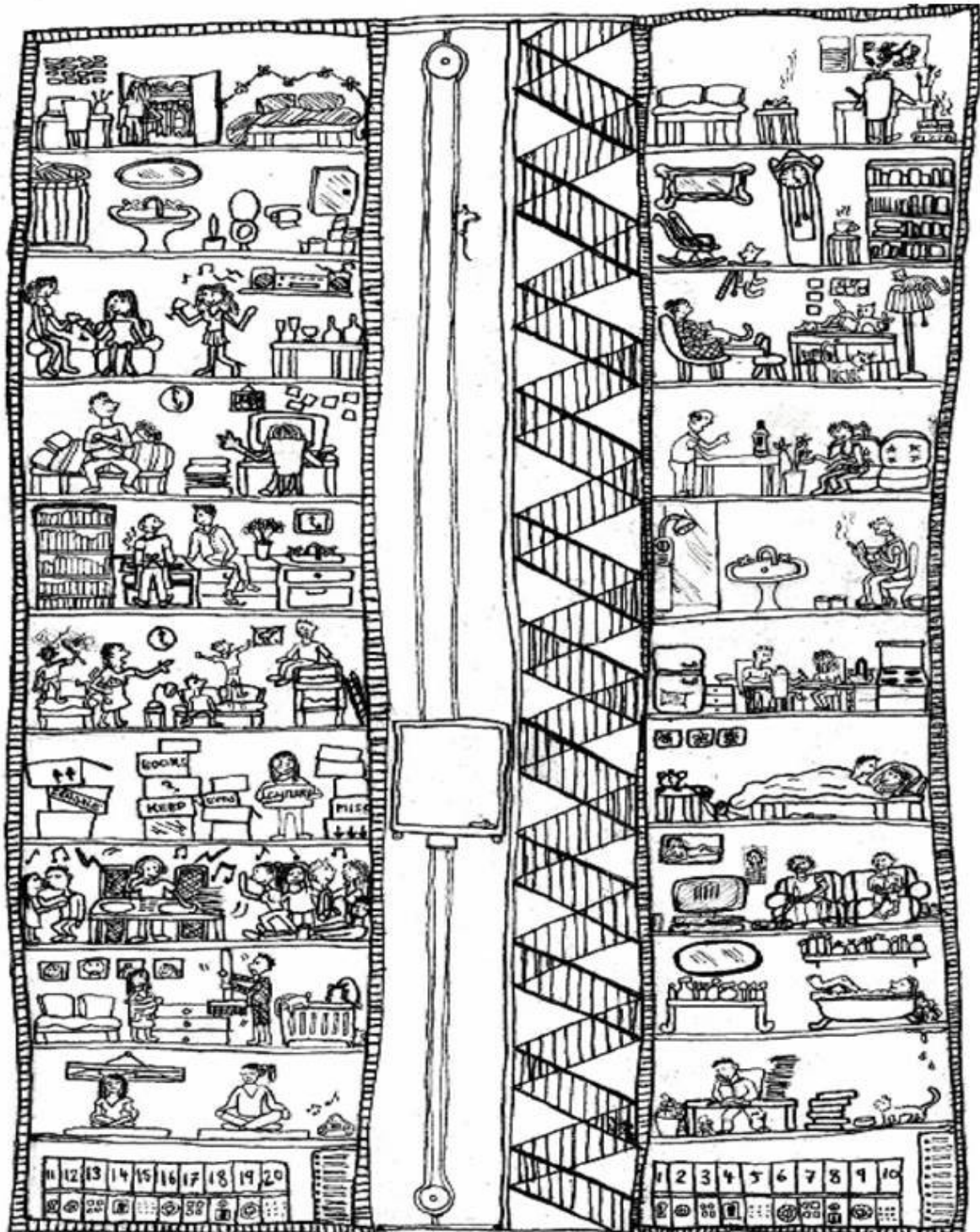


Tower Power



Tower Power

What it is

Tower Power is an emerging community-led alternative to standard customer and supplier relationships in which mainstream power companies hold the power as well as supply the power, leaving vulnerable people the most powerless—in every sense.

Tower Power aims to put the community in control with collective bargaining power to negotiate cheaper electricity for everyone, and equal tariffs for everyone, ending the inequalities of pre-paid meters and the utilities insecurity arising from costly electricity in poor households.

There are two strands to the approach: the technical tools to gather household usage data and maximise local options for power generation, and the community development approach of helping individuals switch to a new community-based method and empowering community members to lead a local Tower Power company.

Why Dumbiedykes

Dumbiedykes is a small urban neighbourhood comprising high rise and low rise housing, in mixed ownership of social and private landlords, and owner-occupiers. It is also known as a deprived area, with 1 in 5 in the population on benefits and many “working poor”. In addition, students and new migrants use the area’s private rented accommodation, contributing to a diversity of languages and cultures in the area. All of these factors make it a great site for a demonstration project.

Tower Power is also a good place to demonstrate a solution blending the bulk-buying approach with on-site power generation, in this case by using the roof space for solar PV panels.

The technical bit

Bringing all of the household usage data into one collective block is called aggregating demand, done through Smart Metering—which can also be prepaid by the consumer. The Smart Meters measure demand at half-hourly intervals and this data is useful to power suppliers—it helps them manage demand, and deal with a ‘bulk’ customer more easily, bringing the price down. The lower price is then passed onto customers, retaining small amounts to cover the cost of the local services. Further cost savings will be achieved for customers by installation of solar PV which will be owned by the community.

The Smart Meters share the data with the local community company via broadband, also bringing the opportunity to empower the community with cheaper broadband. The scheme will be backed by City of Edinburgh Council renewing heating in the flats it owns in the high rise blocks.

The social bit

The technical potential of the scheme is only one factor in its success. We all know the most vulnerable residents are least likely to switch for cheaper tariffs, and most likely to become overwhelmed by debt and money management problems. The community development aspects of the approach are important, proactively ensuring the community is involved and support is available at individual household level to sign up for cheaper electricity.

Over time, the community will form the Board of the company and gain the skills and experience to sustain the scheme.

Tower Power

Who is involved

Community Energy Scotland is leading the scheme, after managing many successful community initiatives for power generation throughout Scotland.

Comas is a community development agency tackling poverty, of which fuel poverty is an important dimension. In Dumbiedykes Tower Power will be backed by 20 More, a project aiming to make every household better off, so it is embedded in activity which is already tackling food poverty and welfare benefits advice.

The City of Edinburgh Council owns 50% of the housing in the area and is committed to achieving low carbon, fuel efficient homes. Synchronising the Council's existing refurbishment programme with Tower Power is enhancing the benefits.

Glasgow City Council is contributing to the demonstration aspect of Tower Power by exploring with us how small-scale urban power generation can feed directly into community benefit, increasing what we can learn from the solar PV generation in Dumbiedykes.

Technical suppliers and power suppliers are also collaborating with the project.

The project process

The community will establish a Community Service Company to run and manage the project. The development and training for this company is an important part of the learning in Tower Power that we will share.

The operational team for the installation and development work will be led by Community Energy Scotland and supported by Comas. During this stage, a Community Customer Service team will be established which will eventually be employed by the Community Service Company for long term maintenance of the scheme.

Alongside the company, two groups will oversee and learn from the project: an Advisory Group and an Incubator Network.

The Advisory Group

This group will oversee the project's implementation, meeting every four to six months. It does not have the legal or financial responsibilities that belong to the company, but it can help implementation by:

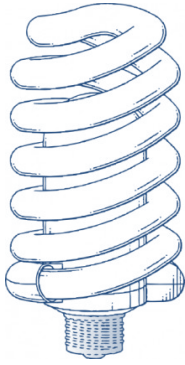
1. Monitoring progress,
2. Helping to find solutions for any challenges we encounter,
3. Linking the project to wider initiatives around Scotland, the UK or worldwide, so that we gain and share learning as widely as possible

If you would like to join this advisory group, please email georgy.davis@communityenergyscotland.org.uk by the 1st of February 2016 outlining what you can bring to this project. We are particularly looking for people interested in electricity supply and generation; housing solutions incorporating power supply; and community leadership of utilities.

The Incubator Group

This group will comprise local initiatives which want to learn from and prepare for replication of Tower Power. If you are actively looking for a local energy solution and want to participate in the incubator group, please email georgy.davis@communityenergyscotland.org.uk outlining your interest.

Tower Power



Cheaper electricity

Up to 15% savings on mainstream suppliers

Equal tariff for prepayment customers.



Utilities security

Reduced number of households losing power, due to poverty



Cheaper broadband

Multi-purposing the connections used for electricity, for wider community benefit



Community connections

Community leadership, local trained volunteers, customer service in our community shop and over the doorstep



Greener and cleaner

Making best use of solar generation in built up urban areas to contribute to local supply.

Helping reduce household demand with better technology and local, friendly support.