What it is, how it works and how you can get involved

SUSTAINABLE ENERGY
SE24 (Sustainable Energy 24) is a new community group based in South London. We aim to encourage and develop locally-owned renewable energy projects, so that we can all reduce our dependence on fossil fuels and put money back into the local community.
1. **What SE24 stands for – Our Vision**

- **Sustainable Energy** – SE24 aims to reduce our carbon footprint by encouraging and setting up local renewable energy projects. To start with we are focusing on installing solar energy panels on community buildings and businesses.

- **Social Enterprise** – SE24 aims to create jobs in the local community through installing and maintaining solar energy equipment and improving insulation and draft proofing in partner properties.

- **Social Engagement** – SE24 aims to plough money back into the local community particularly through action to tackle energy poverty.
2. WHO CAN BE PART OF SE24?

- **Local partners** – churches, schools, industrial premises or other community buildings, with large roof space they would like to use to generate clean electricity, cut their electricity bills and reduce their carbon footprint.

- **Local investors** – who share our vision and would like to help finance one of these local projects – for a long term return but who want to see any surplus used for local philanthropic purposes.
3. **Who can benefit from SE24?**

- **Local partners** – can benefit from discounted electricity.
- **Local investors** – can earn a dividend on their investment but in line with the principle of ‘5% philanthropy’ investor return will be capped at a modest level, with any excess being used for community social engagement.
- **Local communities** – can get financial and practical support for worthwhile charitable enterprises.
- **The environment** – increased use of renewable energy helps reduce long-term CO2 emissions which are a prime cause of global warming.
4. **SE24 Founders and Reference Group**

- The founders of SE24 share a common interest in **cycling**. We form the core of ‘Whoosh’, a Herne Hill cycling group which combines long-distance cycling challenges with charitable fund-raising for community-based causes.

- We have a solid track record of successfully implementing community projects.

- We are from professional backgrounds. The founding group includes an energy market expert, a chartered surveyor, a planning expert, a solar energy professional.

- We are founder members of **Dulwich & West Norwood Climate Change Coalition**.

- In our start up phase we were mentored by **Ovesco**.

- The next slides tell you about the experience and motivation of each of the founders and reference group. To fast forward to Partner Process [click here.](#)
‘I recently retired from the Department for Education after working for 33 years in the field of school building design, economics and asset management. I am a Chartered Surveyor and Past-President of the Society of Construction and Quantity Surveyors in the Public Sector. I have lived in Herne Hill for 26 years. I strongly believe in the contribution renewable energy can make towards a more sustainable and just society for future generations.’

Alan Jones BSc MRICS – Chair of SE24
‘I am a Master Mariner and retired merchant navy deep sea Captain. As I travelled the world I became aware of the adverse effects of fossil fuels and the benefits of renewable energy. I developed a passion for solar energy and solar photovoltaic technology in particular. I am co-founder and first president of Orumba Community Association (UK & Ireland) dedicated to holistic development of the community. I have lived in the SE24 postcode for 30 years.’

Alex Okonkwo – Solar Energy devotee
‘I am a Herne Hill based entrepreneur with a storage business and a forestry enterprise. Most relevantly however I have also invested significantly in solar power in Germany and in the UK. The solar panels on my house produce more electricity than the family use, and I aim progressively to eliminate my carbon footprint.’

Angus Hanton - Community Entrepreneur
‘I have a successful track record in establishing and running social enterprises. I am Chief Executive & founder of Tree Shepherd, which promotes and supports enterprise in the UK’s most marginalised communities. I am the author of How to Make a Million Jobs – A Charter for Social Enterprise. Previously, I set up & ran GreenWorks, which employed marginalised groups, including homeless people & ex-offenders, and was the first business to recycle office furniture on an industrial scale.’

Colin Crooks – Social Enterprise champion
‘I have been a building surveyor for almost 30 years in the public and private sectors. In my previous local authority role I covered construction works in the SE24 area. In my current role as technical director at MLM I have been involved in approval for the large solar panel community energy projects on the Loughborough and Brixton Hill Estates. I have always been interested in sustainable construction and was an energy assessor producing SAP reports on energy performance of dwellings.’

Eroll McDonald – Planning and Building Regulation Expert
‘I was formerly CEO of Fairtrade International. I am now CEO of International Alert, a Stockwell-based charity working in 40 countries to help people bring peaceful resolutions to conflict. I bring experience of running not-for-profit organisations, and a passion for each of us to contribute to social change. My belief in the importance of solar energy comes from hearing first-hand from farmers in the developing world about the terrible impact of climate change.’

Harriet Lamb CBE – Vice-chair of SE24
'I am a publisher by profession and have 10 years experience as a company director. I have lived in South London for over 35 years. I have a passion for local organisation and community action. I hope to transfer that enthusiasm and those skills to this new challenge of reducing our carbon footprint. Having organised charity cycle rides and fundraising for the past ten years I have seen the way that working together with others can make a difficult goal achievable and fun.'

Jim Belben – SE24 Company Secretary
'I am a solar energy engineer working at Sonnedix on asset management for an international portfolio of solar PV plants (100MW+). I have built experience in monitoring systems, yield assessment & performance analysis, as well as in the development & integration of new plants.'
‘I was Professor of Geographical Information Science at City University but now run my own company, Placr, sharing transport information via web applications. I was until recently Chair of Governors at a Lambeth primary school and aiming to do all I can to increase awareness of renewable energy and the importance of energy conservation among young people.’

Dr Jonathan Raper – Information Scientist
‘I spent 25 years leading the Power Utilities team in Price Waterhouse Cooper. I am a member of the DECC Expert Group advising on large-scale low-carbon generation. I retired from PwC in June 2013 but still advise businesses in the power sector on economic, financial and contractual matters. I am chair of the DaWN Climate Change Coalition. SE24 allows me to combine my sector experience and technical skills with my local community focus with friends I have known for many years.’

Mark Hughes – Treasurer of SE24
‘I work for the UK Dept of Energy & Climate Change. I was previously seconded to the British Embassy in Jakarta as Senior Energy & Climate Change Advisor, working on clean energy programmes in Indonesia. I have worked for over 15 years on energy and climate policy. In addition to my knowledge of UK government policies on energy, I bring to SE24 my knowledge of the global implications of carbon emissions and the need to reduce them by the use of renewable energy and energy conservation.’

Dr Paul Chambers – Climate change professional
IT ALL BEGAN ON OUR BICYCLES!
5. The Partnership Process 1

- SE24 is looking for partners who have large, robust roof space suitable for solar installation but who lack the finance or the knowledge or opportunity to complete the installation.

- It will help if our partners share our vision to reduce South London’s carbon footprint, but it is enough to simply want to benefit from cheaper electricity.

- SE24 has partnered two churches in Herne Hill for its first completed projects. We welcome approaches from possible partners such as schools, libraries, industrial units, businesses, social housing.
SE24 will work with owners and users of local community buildings to identify suitable roofs for installation of photovoltaic panel arrays of up to 100kw annual output.

After a potential partner and roof space has been identified the process is simple to ensure that installation is physically viable and financially worthwhile.
Stage 1: Assessing technical feasibility
Conducted by planning professionals
To an agreed schedule
SE24 pays for this feasibility study as part of the investment package

Stage 2: Contractual agreement and planning consent
SE24 will enter into a 20-year lease agreement with building owners in exchange for a discounted electricity supply.
SE24 will remain the owner of the panels over the period.
In the unlikely event that planning consent is required SE24 will advise and help partners organise this

Stage 3: Raising finance
Offer of shares to potential investors
To cover the full cost of purchasing and installing panels

Stage 4: Installation
Third-party suppliers will be commissioned to install and maintain the arrays.
The contract to install will be the result of competitive tendering
Installation can also include some refurbishment to improve energy efficiency

Stage 5: The benefits
Partners enjoy discounted electricity for the life of the contract
Projects serve as a model to others to follow your lead
Another step is taken in reducing the UK's dependence on imported energy and fossil fuels
# SE24 Solar PV Project: Indicative Project Development and Installation Programme

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<tr>
<th>Week</th>
<th>Project Management</th>
<th>Feasibility Work</th>
<th>Share Offer Documentation</th>
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<td>Project meetings</td>
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<td>Share project summary</td>
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<td>Site Board Meetings/Approvals</td>
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<td>Share offer document drafted</td>
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<td>3</td>
<td>Draft and agree project Memorandum of Understanding</td>
<td>Commission structural surveys and reports</td>
<td>SE24 General Meeting to approve launch of share offer</td>
<td>Appoint lawyers</td>
<td>Negotiate and agree final contract sum</td>
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<td>4</td>
<td>Site Board Meetings/Approvals</td>
<td>Commission structural surveys and reports</td>
<td>SE24 General Meeting to approve launch of share offer</td>
<td>Draft Heads of Terms</td>
<td>Apply for DNO registration</td>
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<td>5</td>
<td>Site Board Meetings/Approvals</td>
<td>Commission structural surveys and reports</td>
<td>SE24 General Meeting to approve launch of share offer</td>
<td>Agree Heads of Terms</td>
<td>PV Installation</td>
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<td>Site Board Meetings/Approvals</td>
<td>Commission structural surveys and reports</td>
<td>SE24 General Meeting to approve launch of share offer</td>
<td>Commission S119 survey in respekt of charity obligations</td>
<td>Commissioning and grid connection</td>
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<td>7</td>
<td>Site Board Meetings/Approvals</td>
<td>Commission structural surveys and reports</td>
<td>SE24 General Meeting to approve launch of share offer</td>
<td>Draft lease, land registration and Power Purchase Agreement (PPA)</td>
<td>Submit lease, MCS certificate and other documents to secure FIT</td>
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<tr>
<td>8</td>
<td>Site Board Meetings/Approvals</td>
<td>Commission structural surveys and reports</td>
<td>SE24 General Meeting to approve launch of share offer</td>
<td>Lease and PPA agreed</td>
<td>PV Operation starts</td>
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What is the ideal site for Solar PV?

- A large, south-facing, flat (or gently pitched) roof which is easily accessible and not shaded.
- Structurally sound and capable of supporting up to 110 panels.
- Large enough to allow room around the edges for cleaning access – ideal range 260 to 300 square metres.
- Easy routing to the distribution board and a high level of day-time on-site consumption.
- A good south-facing site which uses up to 85% of the generated electricity itself could save the partner £500 to £600 annually for the 20 years that we run the system yet still offer investors a return of 4%.
The panels go in at Herne Hill United Church
6. **Investor Information**

- **Our vision:** to help investors to pool their resources to fund renewable energy projects using existing buildings in South London. If investors pool their resources more can be achieved, more economically with more environmental benefit. Solar energy in South London is the focus of our first investments and share offer.

- **Our process:** we find partners (roof owners) who want solar power and its benefits, and are able to enter into 20 year lease (the lifetime of the Feed in Tariff), but who lack investors. Once SE24 is convinced of the financial and practical viability they will offer shares to potential investors who share our vision and who seek a modest return and who want to see the surplus used for community philanthropic purposes.

- **Our timescale:** We have recently completed our first installations and will be offering a further investment opportunity in a second share offer in 2017.
**Investor FAQs**

**What is SE24?** SE24 is established as a legal entity called a Community Benefit Society (CBS). The CBS can raise money from investors through a share offer. SE24 is registered with and regulated by the FCA (Financial Conduct Authority). Governance is through a board of directors, elected by members. All investors become members of the CBS with one vote regardless of their shareholding. Projects are financed by SE24 from the pool of funds contributed by investors. All investors fund all projects.

**What are the benefits of being a CBS?** A Community Benefit Society (CBS) aims to benefit the local community (it’s in the name!) However it also has other benefits in this context: the energy efficiency required of partner buildings to be eligible for the Feed-in Tariff are more relaxed than for purely commercial projects.

**How much can I invest?** Minimum £500; maximum £20,000. If a share offer is over-subscribed we will either reduce what we take from each investor or seek additional investment opportunities. However SE24 will not retain shareholder funds unless there are strong prospects for utilising those funds in viable sustainable energy projects.

**How does the project make money?** Income comes from three sources: the Feed-in Tariff (FiT) paid by the government, fixed for 20 years and linked to inflation; the sale of discounted electricity to the partner; the sale of surplus electricity to the national grid.

**How much could I earn?** No dividends will be paid during the first 2 years after the installation. This is to ensure the accumulation of funds in the general reserve to ensure SE24’s viability. At the first Annual General Meeting thereafter SE24 will declare the detailed policy on how it intends to set dividends and repay the capital. Subject to specific affordability constraints, the intention is to deliver an overall return of 4-5% repaying both interest and capital each year. Surplus funds will be distributed for charitable community activities.
What are the ongoing costs? After installation, solar projects are low maintenance. Solar panels have a typical life of 20 years but efficiency degrades at 1%/year. Panels which degrade more quickly than this may need to be replaced. Inverters (which create alternating current to feed the grid) need replacing after 10 years.

What happens after 20 years? After 20 years the CBS will be wound down and the CBS-owned installations will be transferred to the roof owners as agreed in the lease. SE24 investors cease to have a role in the project.

Is my money safe? All investments carry some risk but SE24 will minimise investment risk by engaging professional installers and suppliers, appropriate operations and maintenance experts and taking out insurance to maximise the likelihood of reaching the predicted annual MWh production from each project and to aim for a stable and predictable level of ongoing operating and capital costs. Additionally, each projects’ inflation-indexed FiT is guaranteed by government for 20 years. Moreover, the sale of electricity to roof-owning partners will be at the same rate as guaranteed by government for electricity distributed to the grid. So we will be financially indifferent as to whether the electricity is used by our roof-owning partners or sold to the grid. Income from each project prior to disbursement will be held in an interest-earning account. Accounts will be professionally audited. Our risk management policy will be outlined in the share offer document.

Can I sell my shares? Shares are normally kept for the duration of the project. Applications can be made for withdrawing after a minimum of 3 years, but this is granted at the Board’s discretion to ensure the financial stability of the project. This will only be agreed if a new investor can be found to take your place. However if an investor dies, at the discretion of the Board, SE24 will potentially repay the current value of the capital invested to the Executor (as and when funds are available), or to an individual nominated by the investor.

When does the community benefit? Once the financial viability of the project is ensured and the first dividends are declared the community fund will be activated.
What is Solar energy? The sun emits powerful energy. This can be harnessed in different ways. SE24 use photovoltaic cells (PV) which directly convert the sun’s energy into electricity.

Is it efficient? Large-scale schemes where investors club together to install more panels in larger spaces – as advocated by SE24 – are much more efficient than small-scale schemes because the fixed costs are spread, and the cost of panels and other equipment is less if bought and installed in bulk.

Is it safe? There is no known risk associated with generating electricity through PV panels. The flow of electricity is comparable to that flowing through domestic systems. There is no extra electro-magnetic radiation.

Why only solar? Solar energy in South London is the start of SE24’s ambition. Thereafter we may extend beyond solar if that is practically and financially viable.
How do solar PV panels work?
**Is Solar PV Worth It in South London?**

- South London is not the sunniest area of Britain but still gets up to 1500 hours sunshine per year.
- The Energy Saving Trust estimate that even a small installation in the SE24 post code can generate more than 1500 KWh of electricity. Large-scale installations can generate much more.
- The more sunshine the more electricity. However, PV panels do not need blazing sunshine to work. Even on overcast days some electricity can still be generated.
- And every installation helps a little to reduce dependency on fossil fuels and reduce our CO2 emissions. Plus which installations in highly populated areas have a more significant impact on public awareness. It encourages local engagement with the issue of climate change.
Thanks for watching. If you have questions or want to join us in our attempts to tackle climate change please get in touch.
You can contact the SE24 Officers by email or through the website:

- **Chair** – Alan Jones: alan.adr.jones@gmail.com
- **Treasurer** – Mark Hughes: m.v.hughes61254@gmail.com
- **Vice-chair** – Harriet Lamb: lambpercy@hotmail.com
- **Company secretary** – Jim Belben: jim.belben@btinternet.com
- **SE24 website** – www.SE24.co.uk