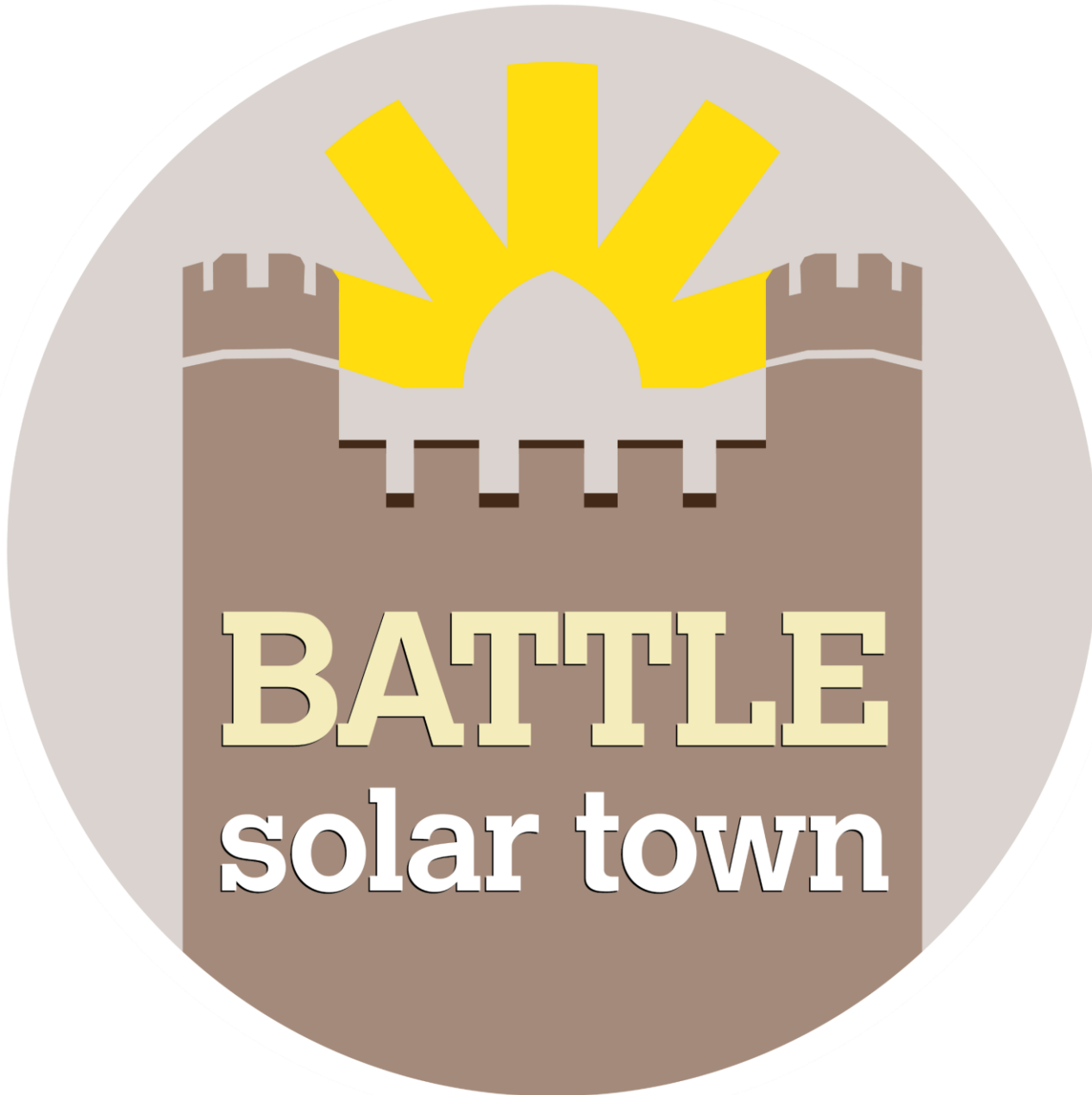


7th  
JUNE  
2024



WHO  
ARE  
WE ?

# WHO ARE WE?

Richard Watson OBE

- ★ Battle resident
- ★ Founder and director of Energise Sussex Coast (a not-for-profit community co-operative venture based in Hastings, which provides energy saving advice and tackles fuel poverty)
- ★ On the boards of Energise South and the Schools Energy Co-op, which has installed solar on 91 schools, saving them £750,000 last year.
- ★ Advising and mentoring the Crowhurst Community Solar scheme.



## WHO ARE WE?

Nicky Bishop

- ★ Battle resident
- ★ Teacher of Classics, Latin and Maths
- ★ Member of Battle Area Green Drinks and Battle Community Eco-Action
- ★ Involved in the local Green Party election campaign
- ★ Involved in a number of local green projects
- ★ Has previously worked in opinion polling, management consultancy, business strategy and marketing communications.



## WE ARE *NOT* ...

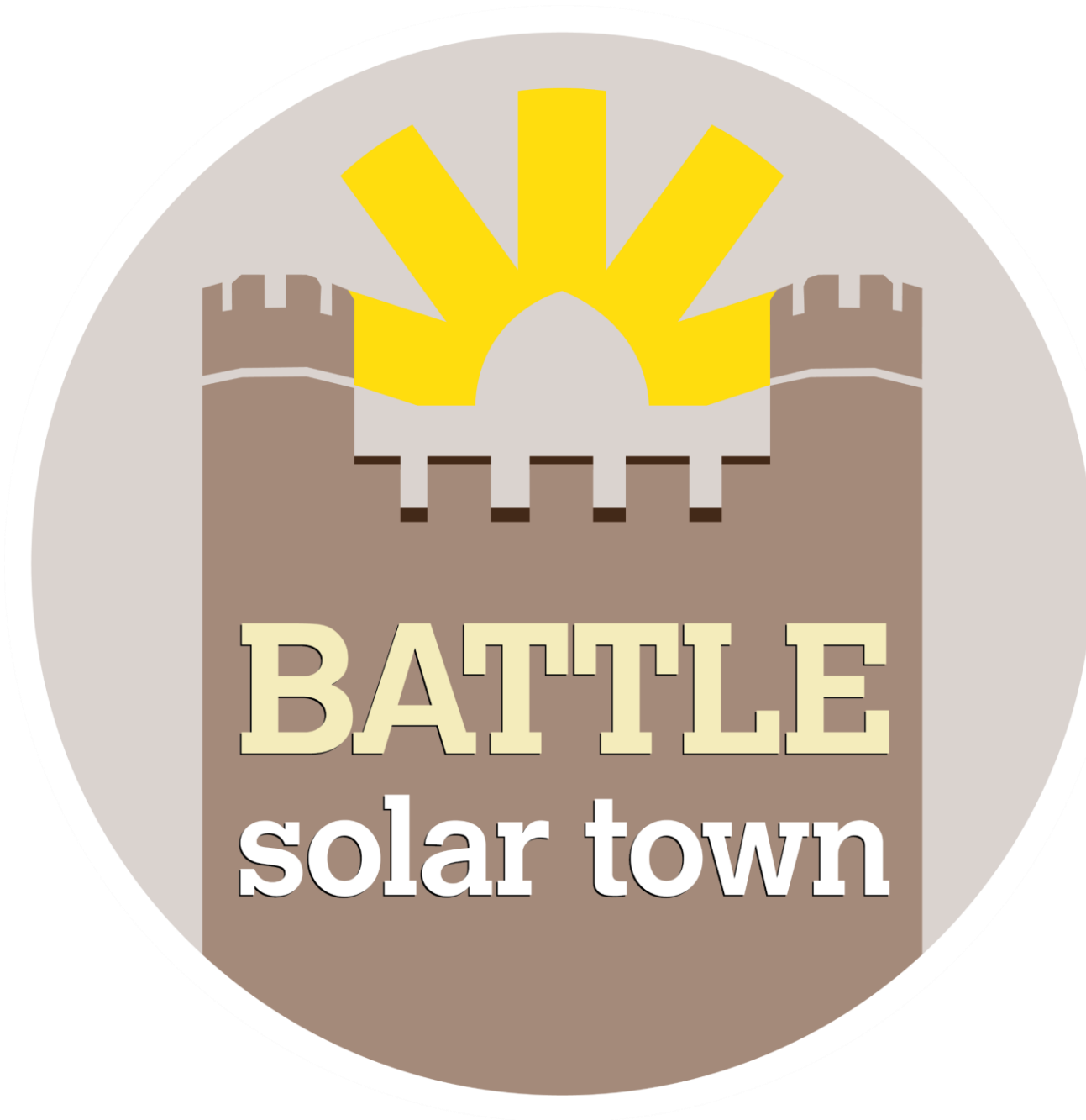
- ★ a commercial business
- ★ getting paid to do this
- ★ looking to make money for ourselves
- ★ financially or legally connected with a power generation or distribution company
- ★ financially or legally connected with a solar panel manufacturer, supplier or installer



## SO WHY ARE WE DOING THIS?

- ★ Because the vision of Battle as a Solar Town has inspired us to (try to) make it happen, and - with your help – we believe we can.
- ★ Because we care about Battle community and town
- ★ Because we want to help Battle and its residents to become more resilient to global change
- ★ Because we want to do our bit to reduce carbon emissions locally
- ★ Because helping to build Battle Solar Town would be an amazing legacy for our children and grandchildren and the whole community





**WHAT'S  
THE  
VISION?**

## WHAT IS A SOLAR TOWN?

- ★ A town where most of the energy consumed is generated in the town
- ★ Our initial hope is to have, say, 25% of Battle's energy demand met locally to deserve the label 'solar town'.
- ★ Generation close to the point-of-use is more efficient; it avoids some of the losses involved in distribution over long distances

In addition,

- ★ A community-led solar town will reduce energy costs for local homes and businesses





# WHAT IS BATTLE SOLAR TOWN?

- ★ clean green, sustainable electricity
- ★ generated in Battle<sup>\*</sup> and used in Battle
- ★ funded (at least in part) and owned by Battle investors via a community energy scheme
- ★ run by Battle people for Battle people
- ★ with profits going into a Battle community fund (and not to a big profit-hungry multi-national)
- ★ which will benefit Battle people

\* the civil parish of Battle, which includes Battle town, Telham and Netherfield



## BATTLE SOLAR TOWN IS *NOT* ...

- ★ A commercial organisation. It's a community group.
- ★ Selling solar panels. Not selling anything in fact.
- ★ Anything to do with time-share or pyramid schemes. Nothing like them at all.
- ★ Political.
- ★ A ready-to-go solution. We prefer to develop the organisation and the solution with Battle community participants.



# ARE THERE OTHER SOLAR TOWNS?

There are ...

★ solar streets in the UK



**OCTOPUS ENERGY INSTALLED ROOFTOP PANELS ALONG  
LYNMOUTH STREET, WALTHAMSTOW, EAST LONDON  
RESIDENTS CROWDFUNDED £113,000**





... TURNING THE STREET INTO ITS OWN MINI POWER STATION,  
SAVING RESIDENTS AT LEAST 1/3 OFF THEIR ENERGY BILLS



# ARE THERE OTHER SOLAR TOWNS?

There are

- ★ solar streets in the UK
- ★ solar neighbourhoods in Detroit, USA and Toronto, Canada



# ARE THERE OTHER SOLAR TOWNS?

There are ...

- ★ solar streets in the UK
- ★ solar neighbourhoods in Detroit, USA and Toronto, Canada
- ★ a solar city in Freiburg-im-Breisgau in Germany





**FREIBURG PRODUCES 4 TIMES MORE ENERGY THAN IT USES,  
MAKING THE TOWN'S PEOPLE VERY WELL OFF!**





# ARE THERE OTHER SOLAR TOWNS?

There are ...

- ★ solar streets in the UK
- ★ solar neighbourhoods in Detroit, USA and Toronto, Canada
- ★ a solar city in Freiburg-im-Breisgau in Germany
- ★ solar/ fossil fuel free islands in Denmark

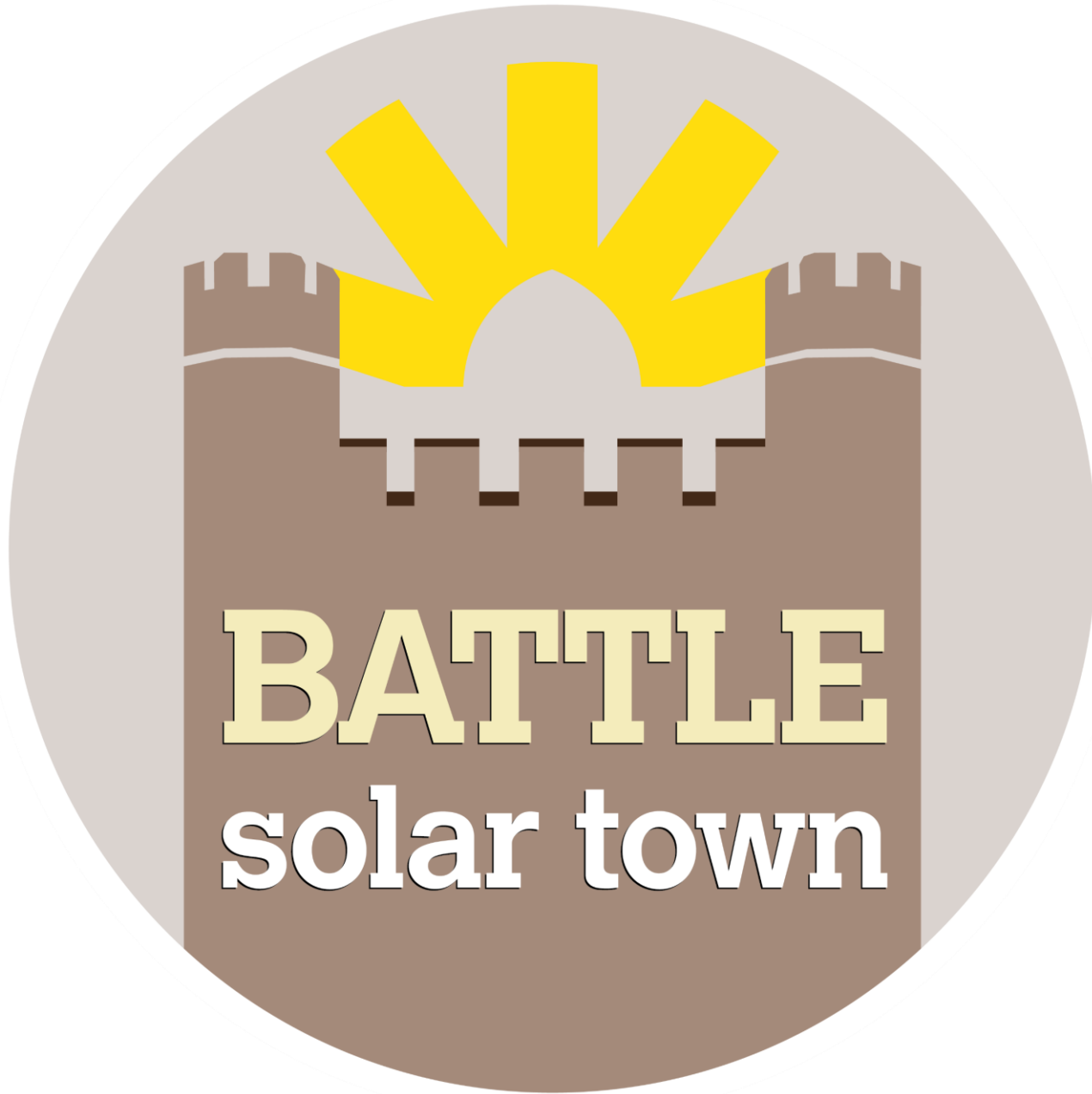




# THE 4,100 RESIDENTS OF SAMSO ISLAND, DENMARK USE NO FOSSIL FUELS







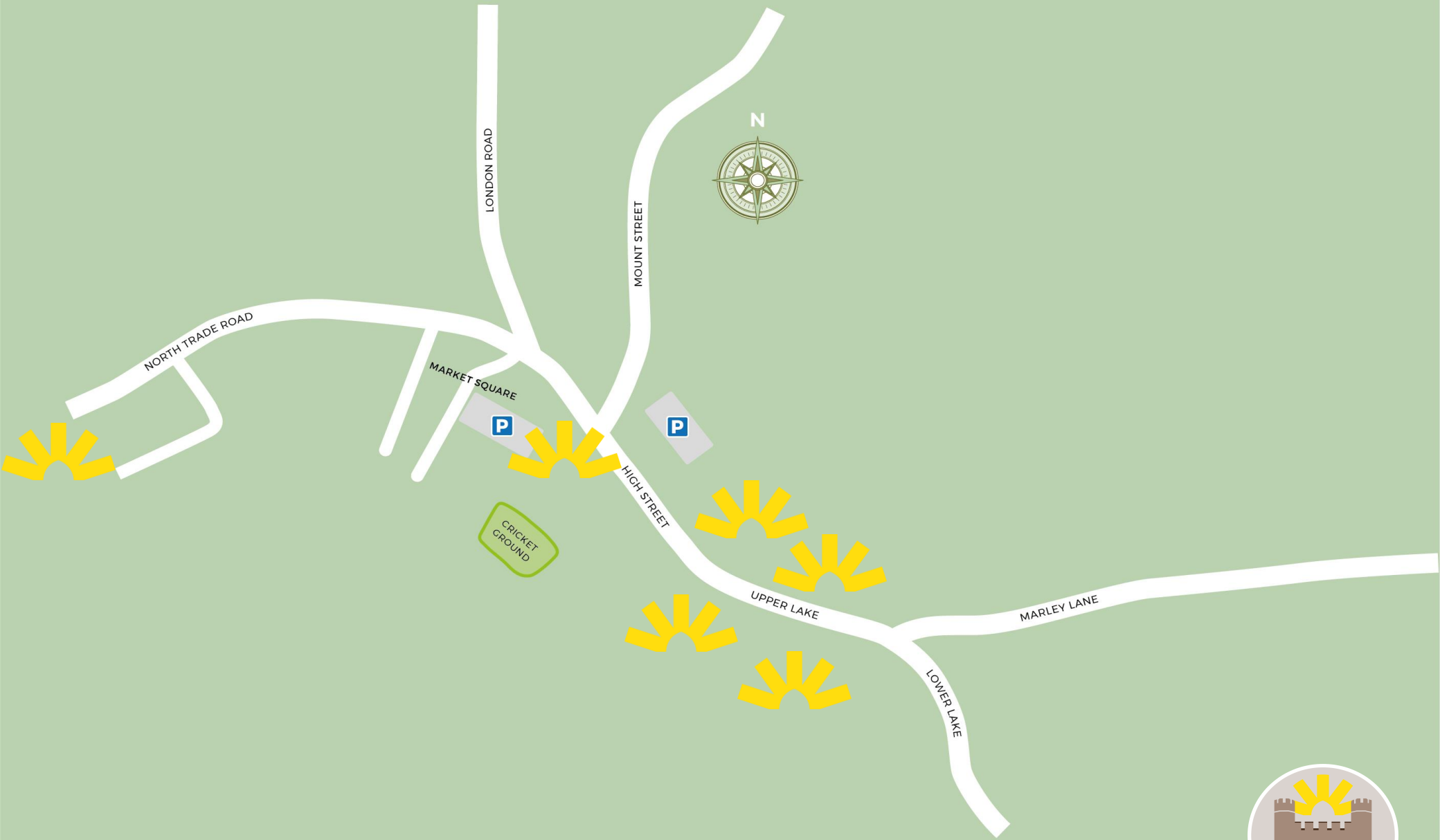
A MAP  
OF  
SOLAR  
BATTLE

## HOW WILL WE GET THERE?

Richard has already had conversations with several organisations and community buildings in Battle which are getting solar panels, or are seriously considering solar:

- ★ The Memorial Hall
- ★ The Almonry and Museum
- ★ St. Mary's Church
- ★ Battle Abbey School
- ★ Claverham School
- ★ Pyke House (Claremont)

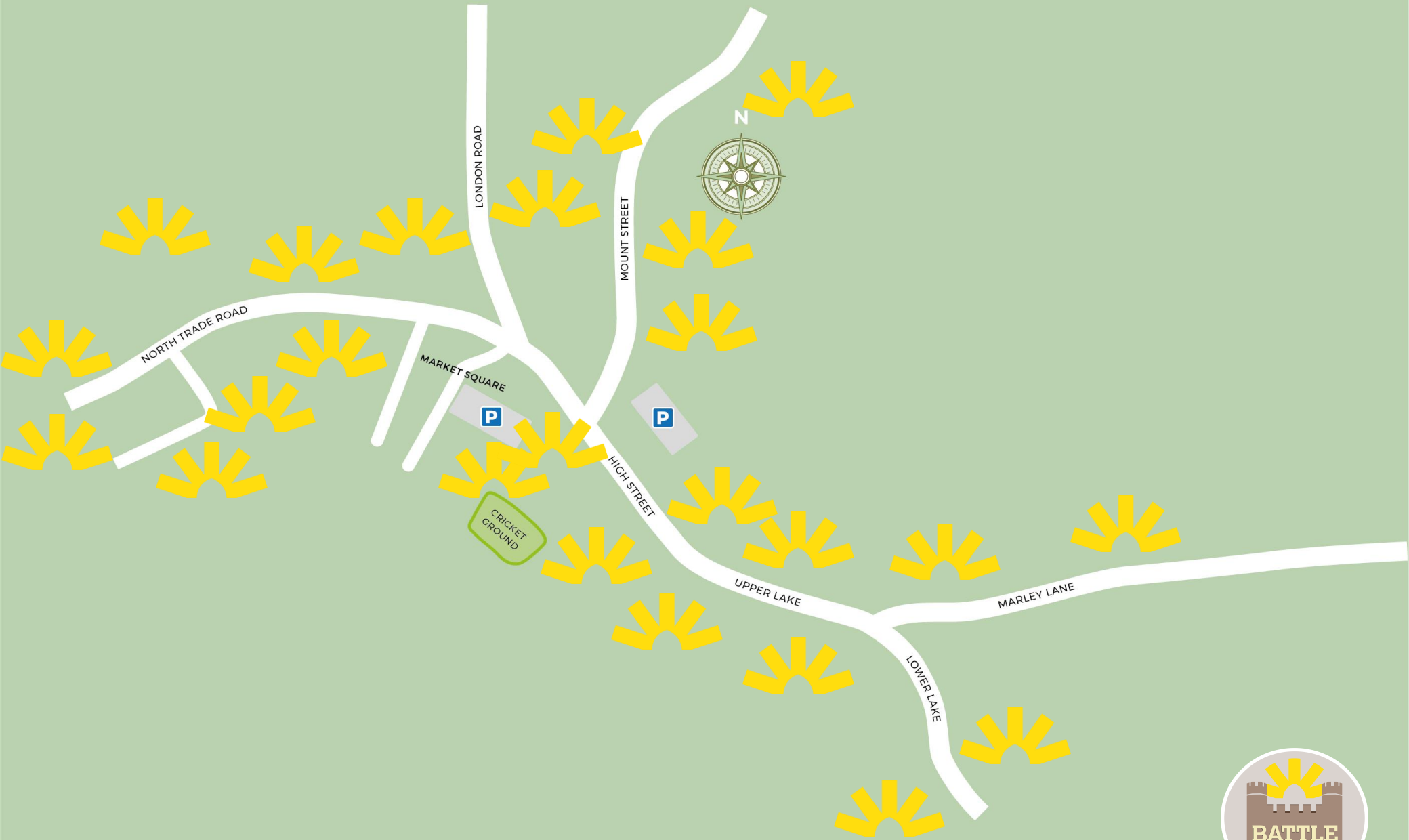




## HOW WILL WE GET THERE?

- ★ Several organisations in Battle are getting solar panels, or are seriously considering solar
- ★ Dozens of households in Battle have got solar panels, or are planning to get solar.
  - ★ The map shows just a few of these.



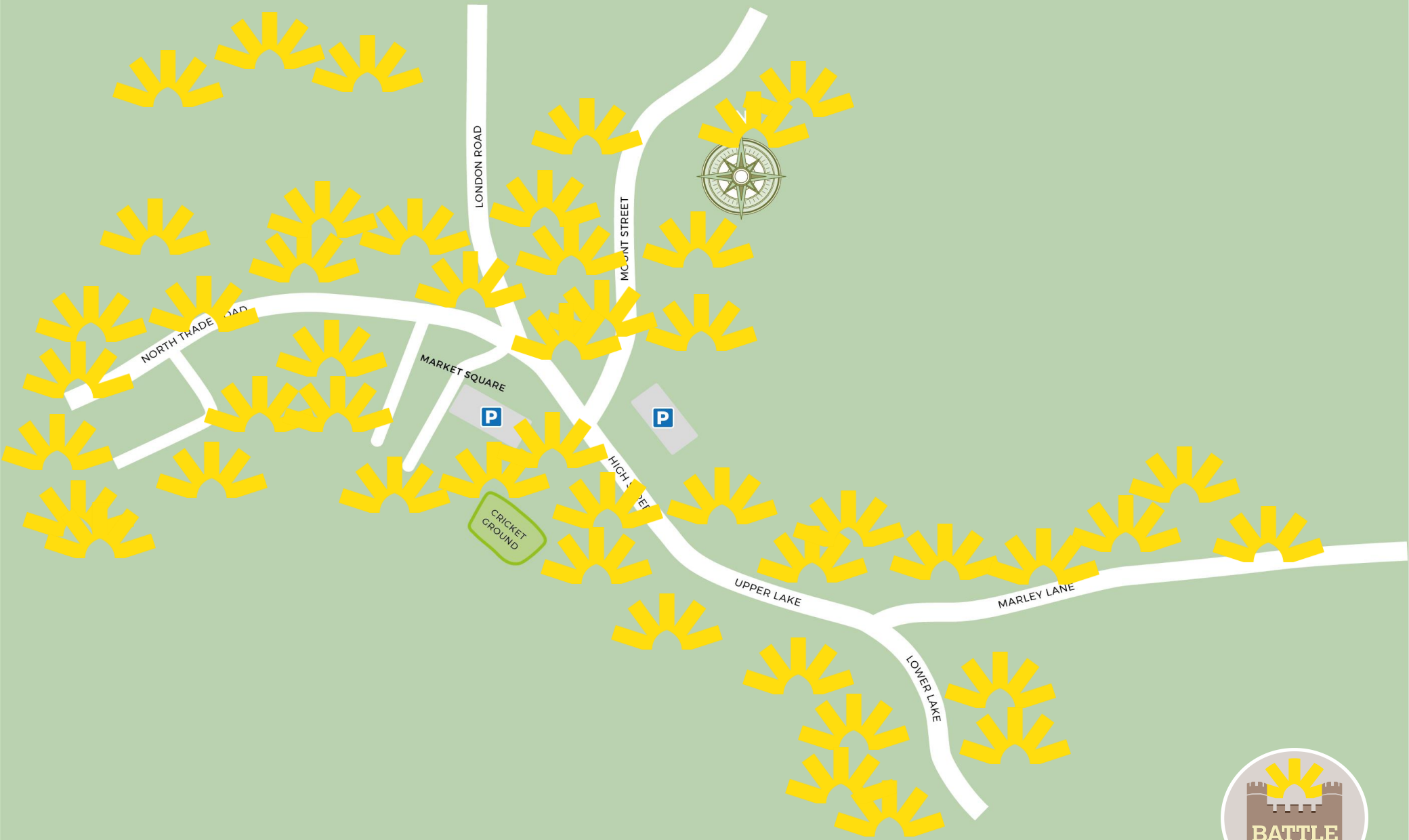


## HOW WILL WE GET THERE?

- ★ Several organisations in Battle are getting solar panels, or are seriously considering solar
- ★ Dozens of households in Battle have got solar panels, or are planning to get solar
- ★ There are many other buildings in Battle which would be suitable for solar panels







LONDON ROAD

MOUNT STREET

NORTH TRADE ROAD

MARKET SQUARE

HIGH STREET

UPPER LAKE

LOWER LAKE

MARLEY LANE

CRICKET GROUND

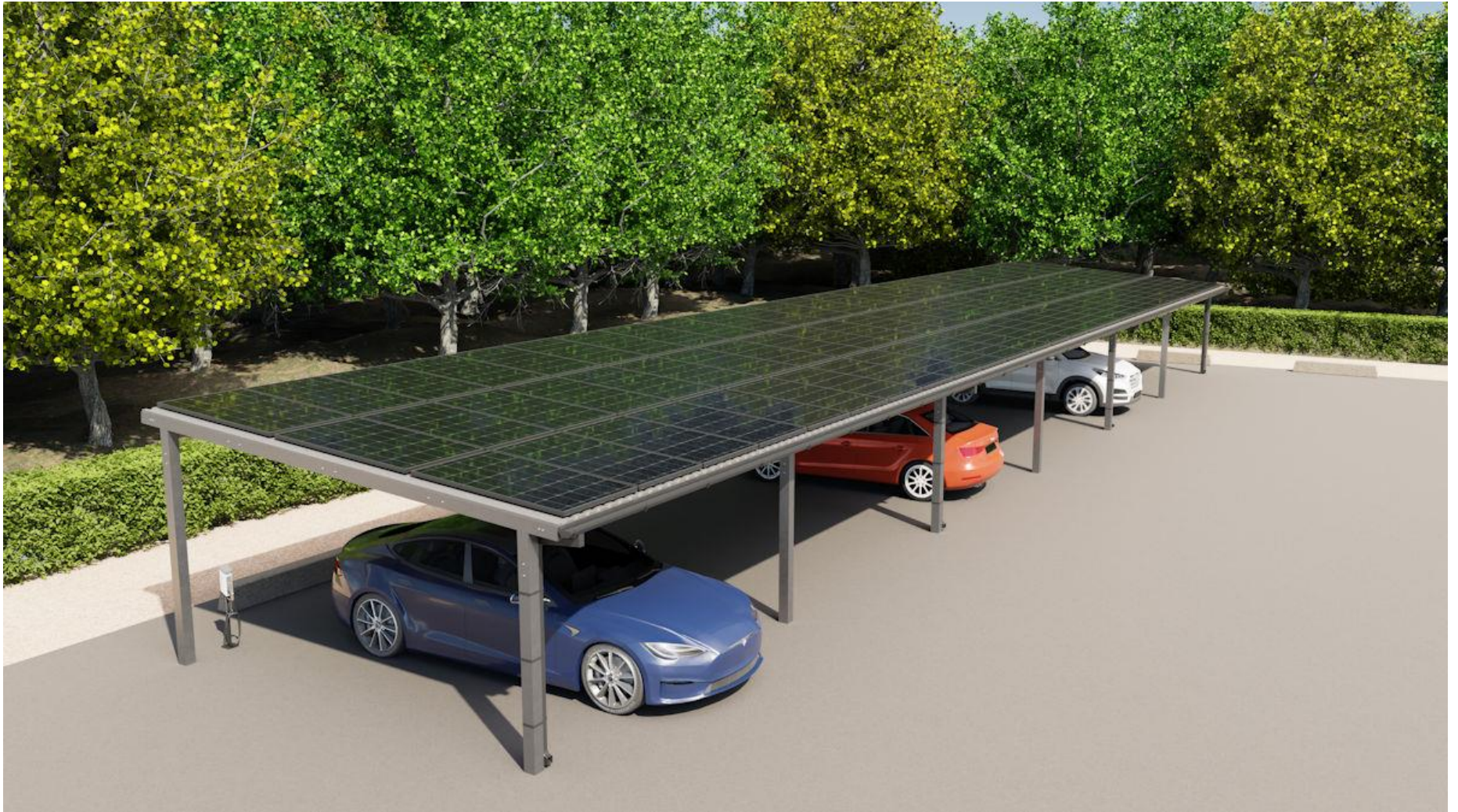


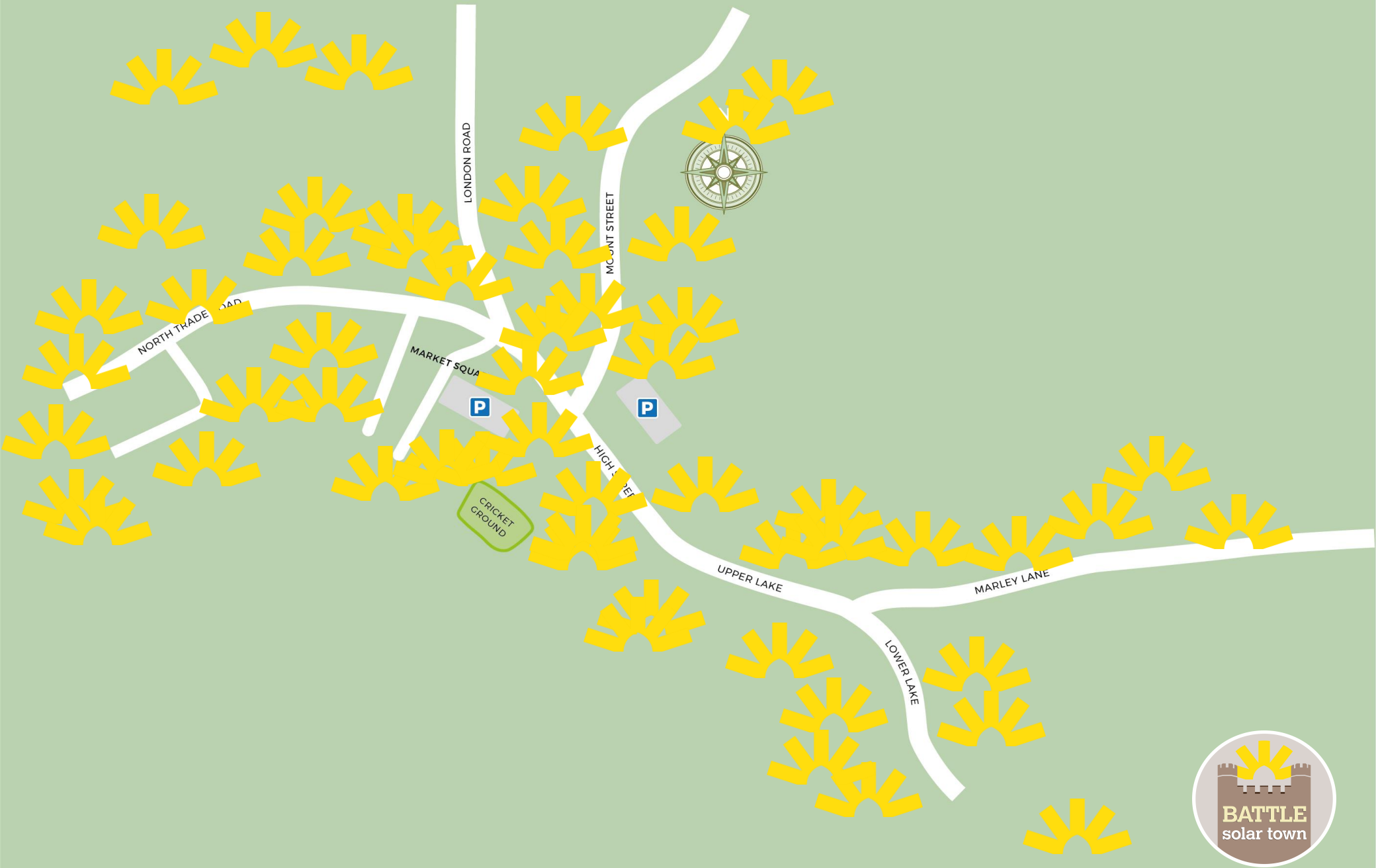
## HOW WILL WE GET THERE?

- ★ Several organisations in Battle are getting solar panels, or are seriously considering solar
- ★ Dozens of households in Battle have got solar panels, or are planning to get solar
- ★ There are many other buildings in Battle which would be suitable for solar panels
- ★ And Battle's car parks could include solar car-ports.

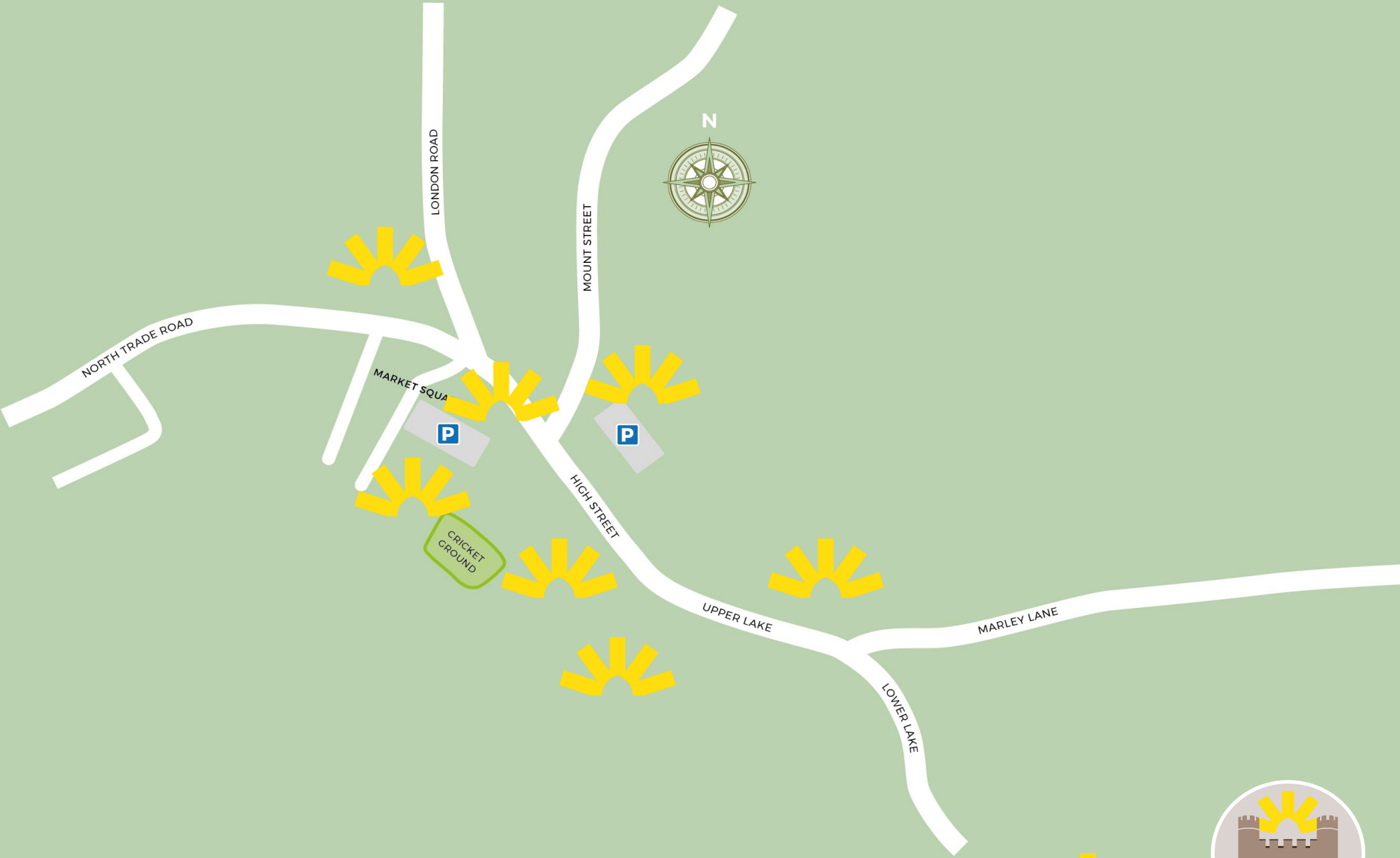


**EASTBOURNE DGH HAS A CANOPY OF 2,250 SOLAR PANELS ABOVE ITS CAR PARK. THE IMAGE BELOW IS CLOSER TO THE SCALE WE MIGHT SEE IN BATTLE.**



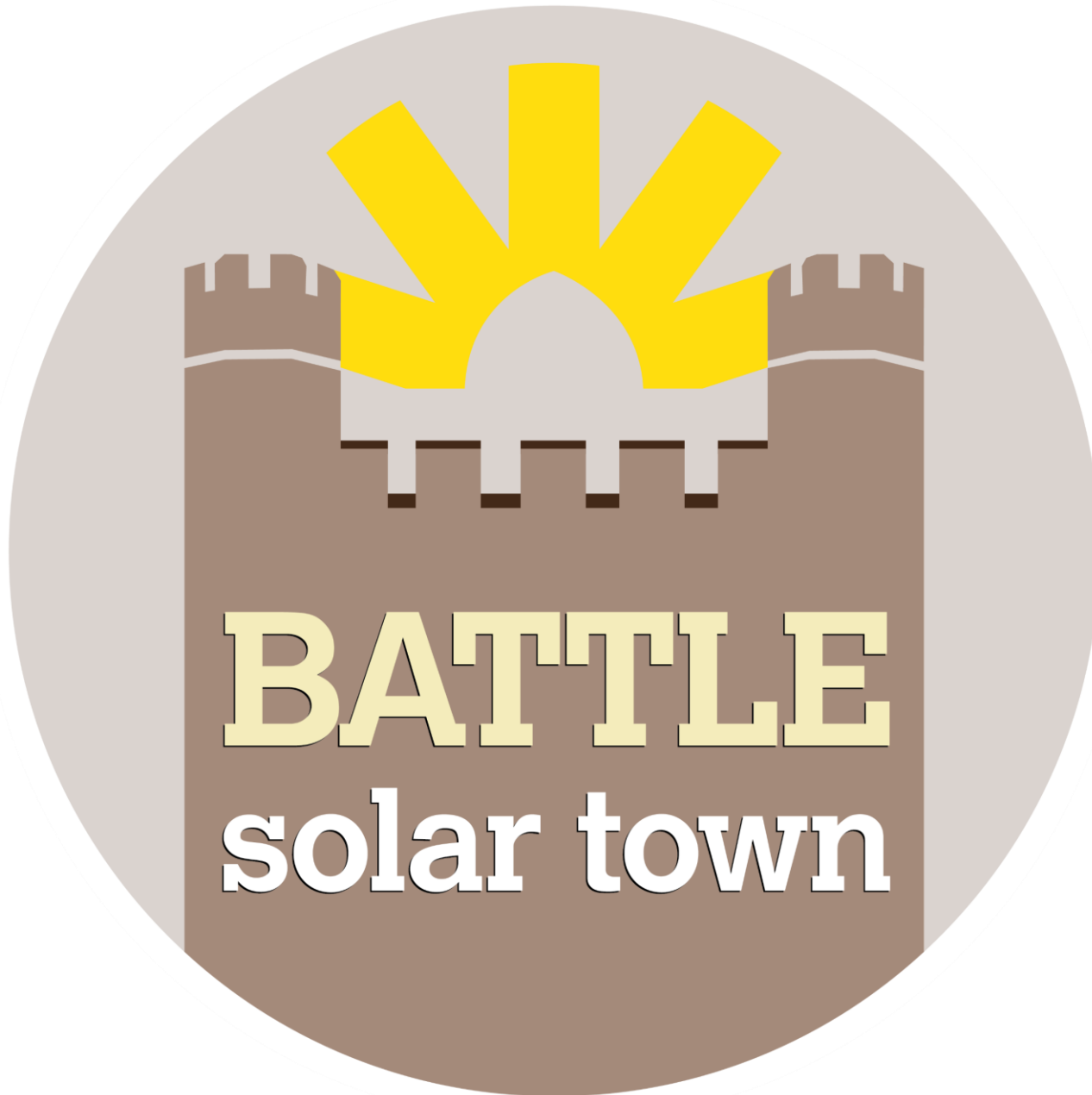






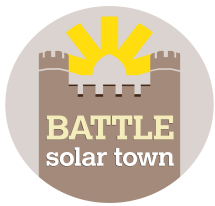


HOW  
WOULD  
IT  
WORK?



HOW  
WOULD  
IT  
WORK?

A.  
ENERGY



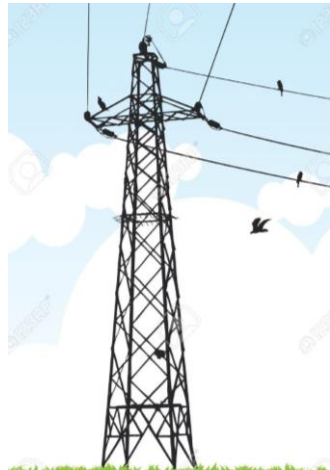
# WHERE DOES THE ENERGY COME FROM? AND WHERE DOES IT GO?



local homes  
& businesses



community  
micro-grid



the grid



local substation



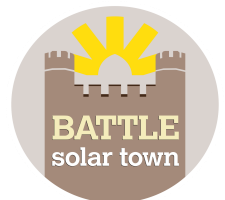


# HOW WOULD LOCALLY PRODUCED ENERGY BE DISTRIBUTED TO LOCAL HOMES AND BUSINESSES?

There are 5 possible ways to do this, provided by 5 different organisations:

- ★ 'energy local club' with time-of-day tariff (Energy Local)
- ★ peer-to-peer energy exchange (Urban Chain)
- ★ private-wire microgrid (Emergent Energy)
- ★ solar sharing micro-grid (Joju Solar)
- ★ solar microgrid (Allume SolShare)

We have a detailed analysis of the pros and cons of each.

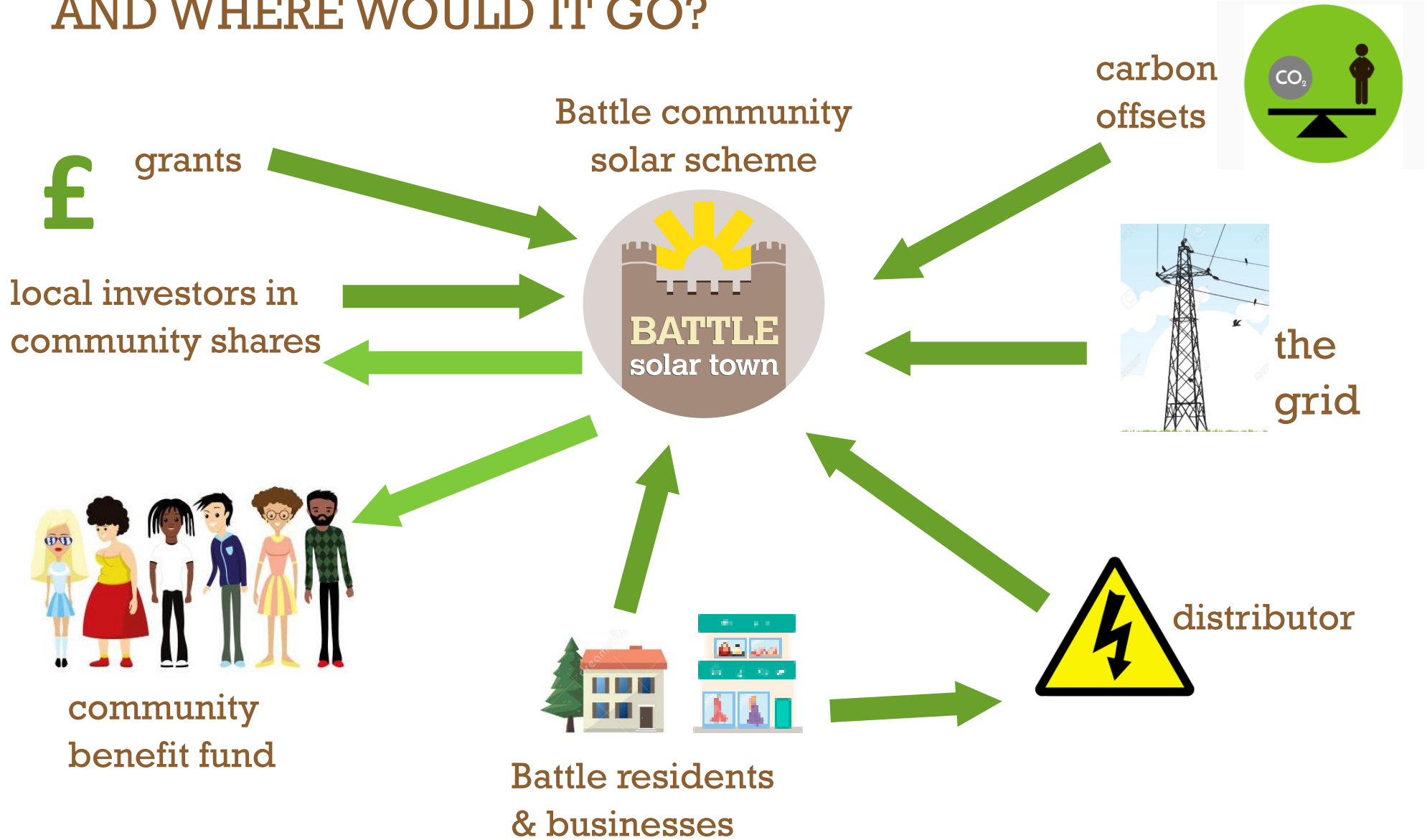




HOW  
WOULD  
IT  
WORK?

B.  
MONEY

# WHERE WOULD THE MONEY COME FROM? AND WHERE WOULD IT GO?



## HOW MUCH WOULD ELECTRICITY SUPPLIED THROUGH BATTLE SOLAR TOWN COST?

- ★ Electricity purchased from or generated by the Battle Solar Town scheme should cost households and organisations **significantly less** than they are currently paying.
- ★ For example, the residents of Lynmouth Street have reduced their bills by one-third
- ★ For example, energy suppliers like Octopus or 100Green could buy the surplus energy produced in Battle and sell it to other Battle residents and businesses at a discounted tariff



## HOW CAN HOMEOWNERS PAY FOR SOLAR PANELS?

- ★ From savings or a bank loan
- ★ With a loan from e.g. Lendology CIC which specialises in loans for solar, insulation and retrofit
- ★ Community fund-raising for a solar street scheme, like Lynmouth Street in Walthamstow, which raised money through crowdfunding
- ★ ECO (energy company obligation) grants for individual homes (depending on eligibility)
- ★ Through a pay-as-you save scheme, with the up-front installation cost met from the community shares scheme



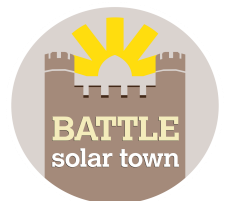
## WHAT'S A COMMUNITY SHARES SCHEME?

- ★ Also known as 'withdrawable shares in a Community Benefit Society.'
- ★ They are 'withdrawable' because the investor can take their money out of the organisation at any time if they choose to.
- ★ Unlike typical company shares, community shares cannot be sold, traded or transferred between members.
- ★ Shareholders become members of the business or organisation they invest in.
- ★ Shareholders earn dividends. Typical dividends in community energy schemes are 4% to 5% per year
- ★ Shareholders can vote in the running of the scheme.



## WHAT'S A PAY-AS-YOU-SAVE SCHEME?

- ★ A Community Share Scheme or Lendology could pay the up-front money to install solar panels on your roof
- ★ You save money on your electricity bills every month
- ★ Some of the money you save is used to pay back the cost of the panels to the share scheme or lender



## WHERE DO THE PROFITS GO?

Profits will:

- ★ pay for maintenance of community-owned panels
- ★ pay a small (4% to 5%) dividend to investors in the community energy scheme
- ★ the rest will go into a Battle Community Fund for the benefit of Battle people

What level of profits is achievable?

- ★ Perhaps £20,000 to £50,000 per year, depending on global energy prices and the size of the scheme





## WHAT'S THE PROJECTED RETURN ON INVESTMENT (ROI)?

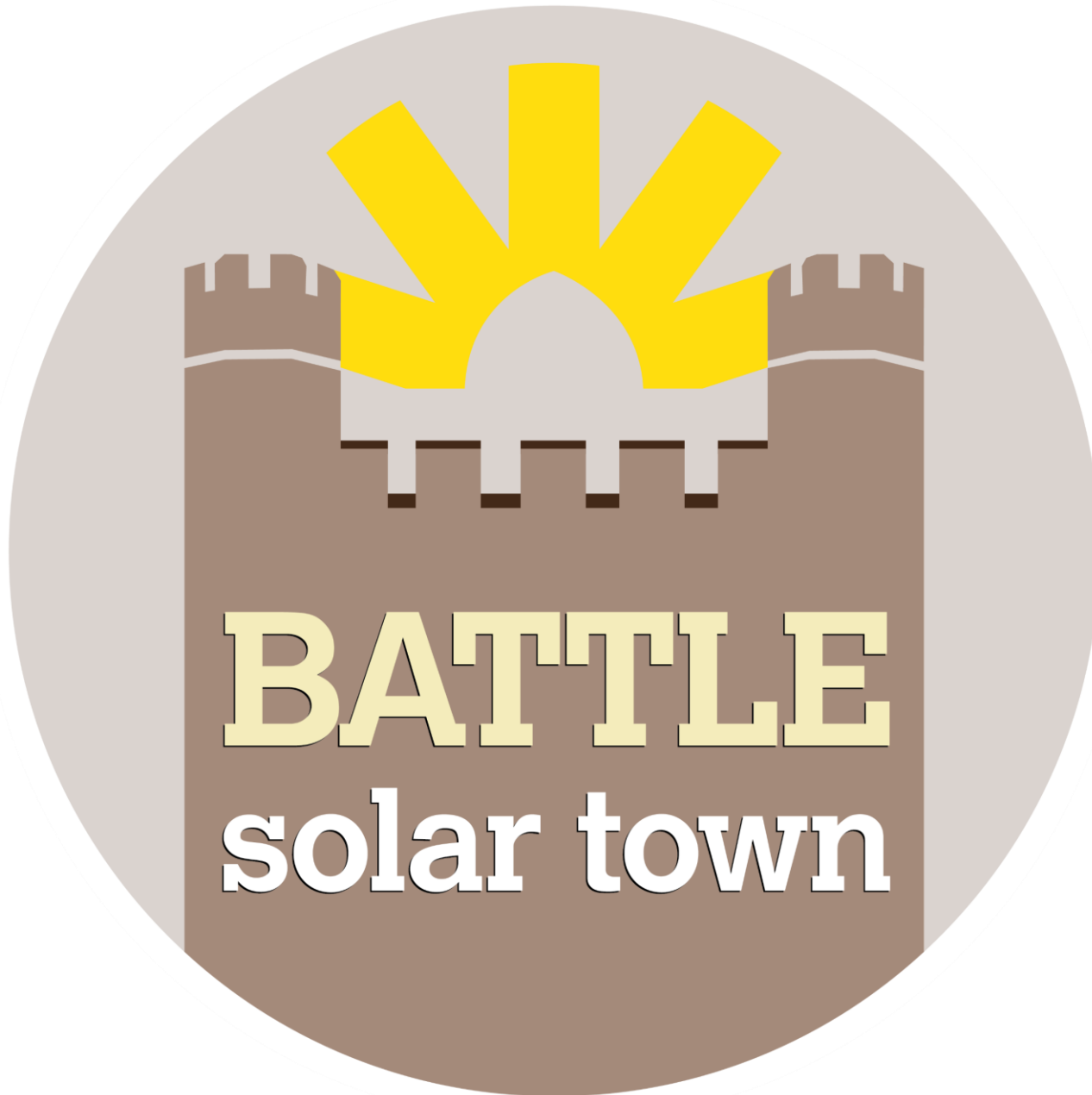
- ★ We don't know yet; the project is not that far advanced.
  - ★ But it's clearly important to know this early on
  - ★ It will be part of our initial feasibility study
  - ★ It would be great to have a team member with investment analysis skills who could work on this
- 
- ★ However, typical ROI on projects like this is in the region of 6% to 8%



## WHAT'S A COMMUNITY BENEFIT FUND?

- ★ Funds would be used to support projects for the benefit of the community
- ★ e.g. extra stuff for schools, footpaths and cycle paths, cultural events, play equipment, community orchards, ... whatever the people of Battle tell us they want most
- ★ Allocation of the funds would be decided by the community, or by community representatives appointed for this purpose
- ★ Funds would come from the post-dividend profits of the Battle Solar Town
- ★ The Battle Community Benefit Fund would be run by a board of trustees set up for this purpose





HOW  
WOULD IT  
WORK?

C.  
STRUCTURE

# HOW WILL BATTLE SOLAR TOWN BE SET UP AND ORGANISED?

It could be:

- ★ a Community Interest Company (CIC)
- ★ a Community Benefit Society (CBS)
- ★ or a Charitable Incorporated Organisation (CIO)

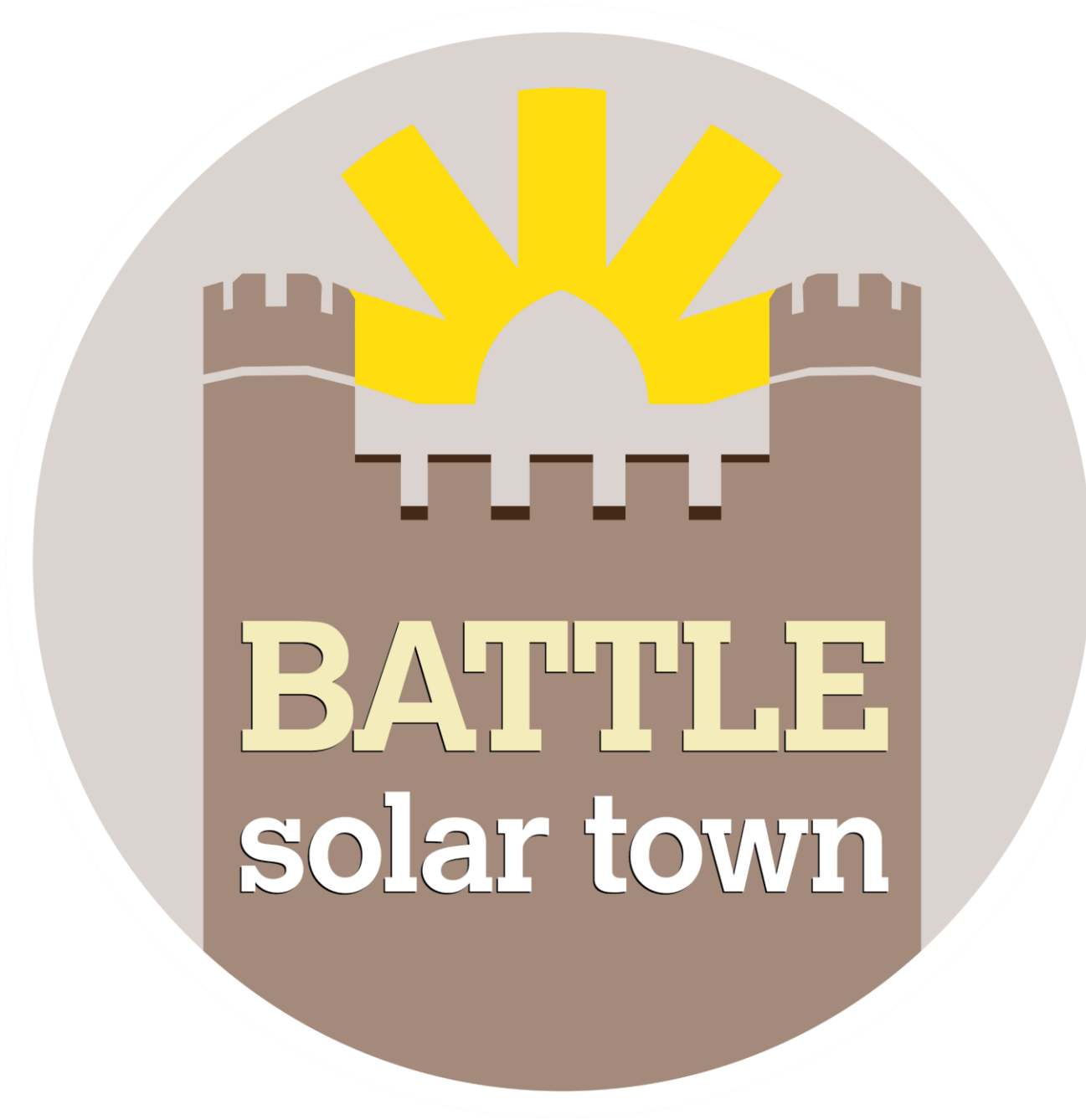
There are pros and cons of each. That choice will be made by Battle participants in the community project.

The organisation will oversee 3 functions:

- ★ Battle Solar Town Community Shares Scheme
- ★ Battle Solar Town Community Energy scheme
- ★ Battle Solar Town Community Benefit Fund



# FAQs



## DOES EVERYONE WITH SOLAR *HAVE* TO BE PART OF THE BATTLE SOLAR TOWN SCHEME?

- ★ Building owners and occupiers can operate completely independently, if they prefer.
- ★ *OR* they can choose to work together in the Battle Solar Town community energy scheme.
- ★ People can choose not to get solar at all, if they prefer not to.
- ★ Nothing is compulsory.



# HOW WILL I BENEFIT IF I JOIN THE BATTLE SOLAR TOWN COMMUNITY ENERGY SCHEME?

- ★ significantly cheaper electricity for your home or business
- ★ you could also invest and earn dividends
- ★ cheaper electricity for local businesses and shops could mean cheaper prices for goods, or help businesses in our town to stay open
- ★ you would have a say in how the community benefit fund is spent





## IF I ALREADY HAVE SOLAR, WHY SHOULD I BOTHER TO JOIN THE SCHEME?

In addition to the benefits already mentioned,

- ★ you could earn more for the solar you export
- ★ you could pay less for any energy you need to import



## IS BATTLE TOWN COUNCIL INVOLVED?

- ★ This is *not* a town council project, but we are keen to have their support
- ★ We have had a promise of support for a preliminary feasibility study from the Town Council's Climate & Ecology sub-committee
- ★ We have also presented the scheme to the Finance & General Purposes Committee which is considering putting solar panels on the Almonry and Museum
- ★ We plan to present the idea to the Full Council (subject to having sufficient community support)



# CAN WE PUT SOLAR PANELS ON LISTED BUILDINGS?

- ★ Listed buildings *can* have solar panels if they meet certain conditions
  - ★ e.g. the panels should not be visible from a public highway nor damage the original structure
  - ★ e.g. Salisbury Cathedral and Trinity College Cambridge



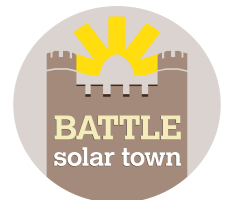
# SALISBURY CATHEDRAL HAS ROOFTOP SOLAR PANELS

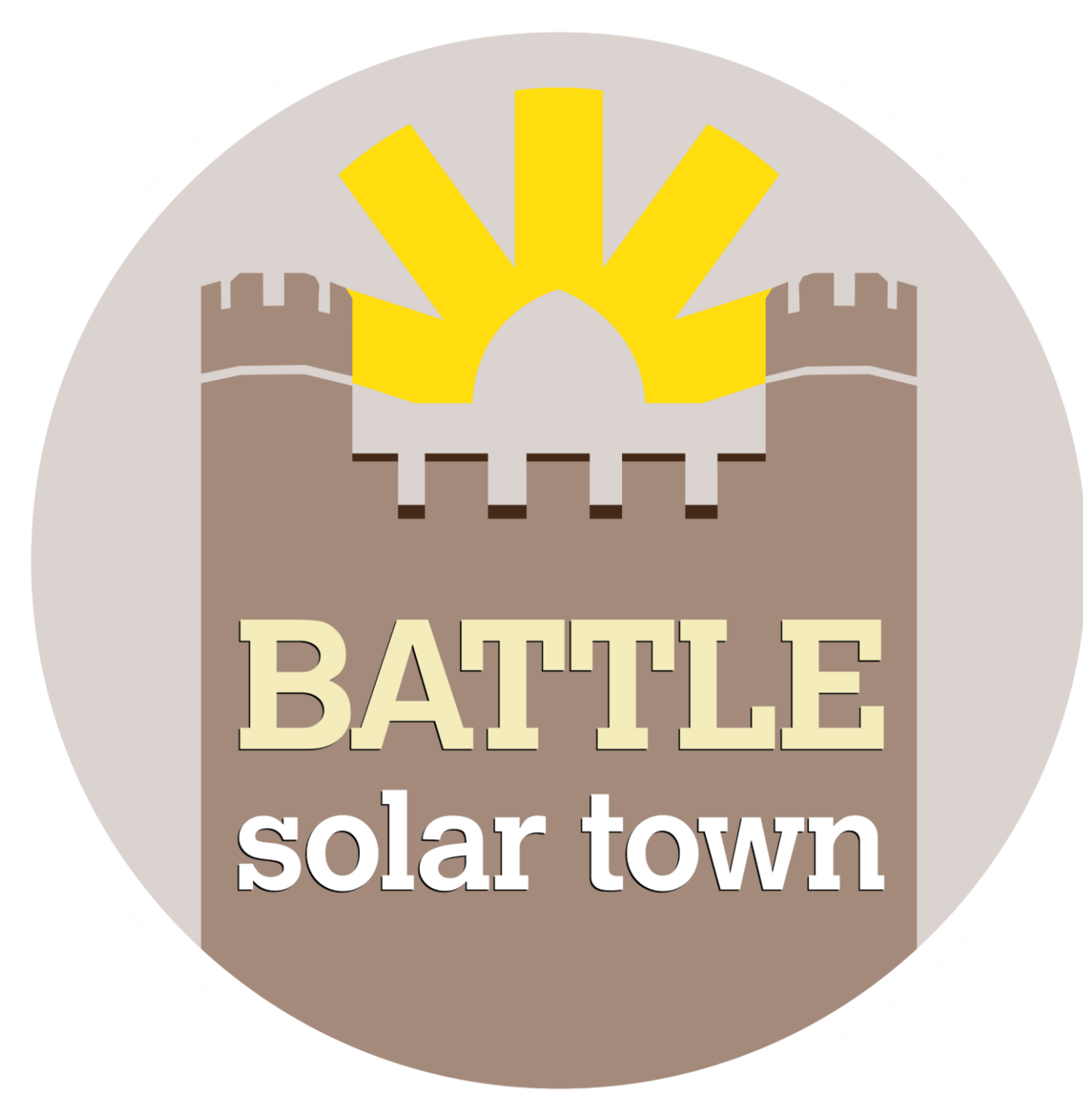
- ★ Salisbury Community Energy formed in 2017 to install solar on schools and churches in the city.
- ★ They approached the Cathedral, with little hope of success, but the Canon and the local Bishop were keen.
- ★ The scheme was approved by the Church of England's planning bodies, subject to specific criteria being met:
  - ★ the panels must not be visible from the ground, nor from higher ground in the Salisbury area
  - ★ no drilling into the historic structure of the building
  - ★ no damage to the lead roof covering
- ★ The panels were installed in 2019



# CAN WE PUT SOLAR PANELS ON LISTED BUILDINGS?

- ★ Listed buildings *can* have solar panels if they meet certain conditions
  - ★ e.g. the panels should not be visible from a public highway nor damage the original structure
  - ★ e.g. Salisbury Cathedral and Trinity College Cambridge
  - ★ The same conditions may apply to buildings in a conservation area
- ★ They are likely to require planning permission and listed building consent
- ★ Rother District Council's new Local Plan (currently open for consultation on RDC's website) may make it even easier to get approval





**NEXT  
STEPS**

## NEXT STEPS FOR THE TEAM

- 1) Set up a project team involving Battle residents
- 2) Establish how much energy Battle currently uses
- 3) Establish how many buildings in Battle have solar and how much solar energy is already being produced
- 4) Find solar champions in schools, care homes, housing associations, etc.
- 5) Apply for a grant to cover the cost of the feasibility studies
- 6) Commission preliminary technical and financial feasibility studies to establish the solar potential of Battle, financial viability and potential profitability





## WHAT CAN YOU DO NEXT?

- ★ Sign up to find out more
  - ★ Tell your friends and neighbours
  - ★ Let us know if you already have solar panels
  - ★ Join the Battle Solar Town project team and help make the vision a reality
  - ★ Help us to convince local building owners, such as schools, to join the scheme
- and when the time comes ...
- ★ Think about investing in the Battle Solar Town community energy scheme





GET IN TOUCH

Nicky Bishop

Richard Watson

[battlesolartown@gmail.com](mailto:battlesolartown@gmail.com)

SO ...

- ★ Battle Solar Town is not a small project
  - ★ there's a lot to do
  - ★ it's not going to be quick
- ★ Battle Solar Town is not simple project
  - ★ each site may present different challenges
  - ★ lots of complex decisions to be taken
- ★ But it is an exciting and worthwhile project
  - ★ and – with your help - it can be done!



**THANK YOU  
FOR BEING HERE.**

**ANY QUESTIONS?**



GET IN TOUCH

Nicky Bishop

Richard Watson

[battlesolartown@gmail.com](mailto:battlesolartown@gmail.com)



# CLAVERHAM COMMUNITY COLLEGE CASE STUDY

- ★ 783 panels and batteries
- ★ would cost BST investors c. £375,000
- ★ would generate 303,000 kWh per year
- ★ school would save £3.5m on energy costs over 25 years, paying 12.5p per unit (instead of 40p)
- ★ School pays BST for electricity £1,196,000 over 25 years
- ★ Total scheme profits £464,000 before dividends
- ★ Pays back investors c. 5% per annum from year 3
- ★ Would generate surplus for the community £219,000 over 25 years.
- ★ This is a no brainer for the school, but we need to convince ESCC to support the scheme!

