New Ash Green Solar

Presentation to Ash-cum-Ridley Parish Council
13 November 2024

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New Ash Green Solar

Introduction

- Evolution Power is a UK based, independent solar and energy storage developer
- The team has developed and/or financed over 50 UK solar projects, including some of the largest UK projects built to date
- An experienced project team has been engaged to advise and assist with the application

Evolution Power Management Team

Giles Frampton

- An engineer who has led the origination, development and construction of over 600MW solar
- Built the three largest ROC subsidised projects operating in the UK

Conor McNally

- Previously a Managing Director at a leading investment bank active in renewables
- Arranged c. 1GW funding solutions for UK solar equity investors

New Ash Green Project Team

axis | LCES | ARUP | Reading Agricultural Consultants | Quantum Public Relations

Project overview

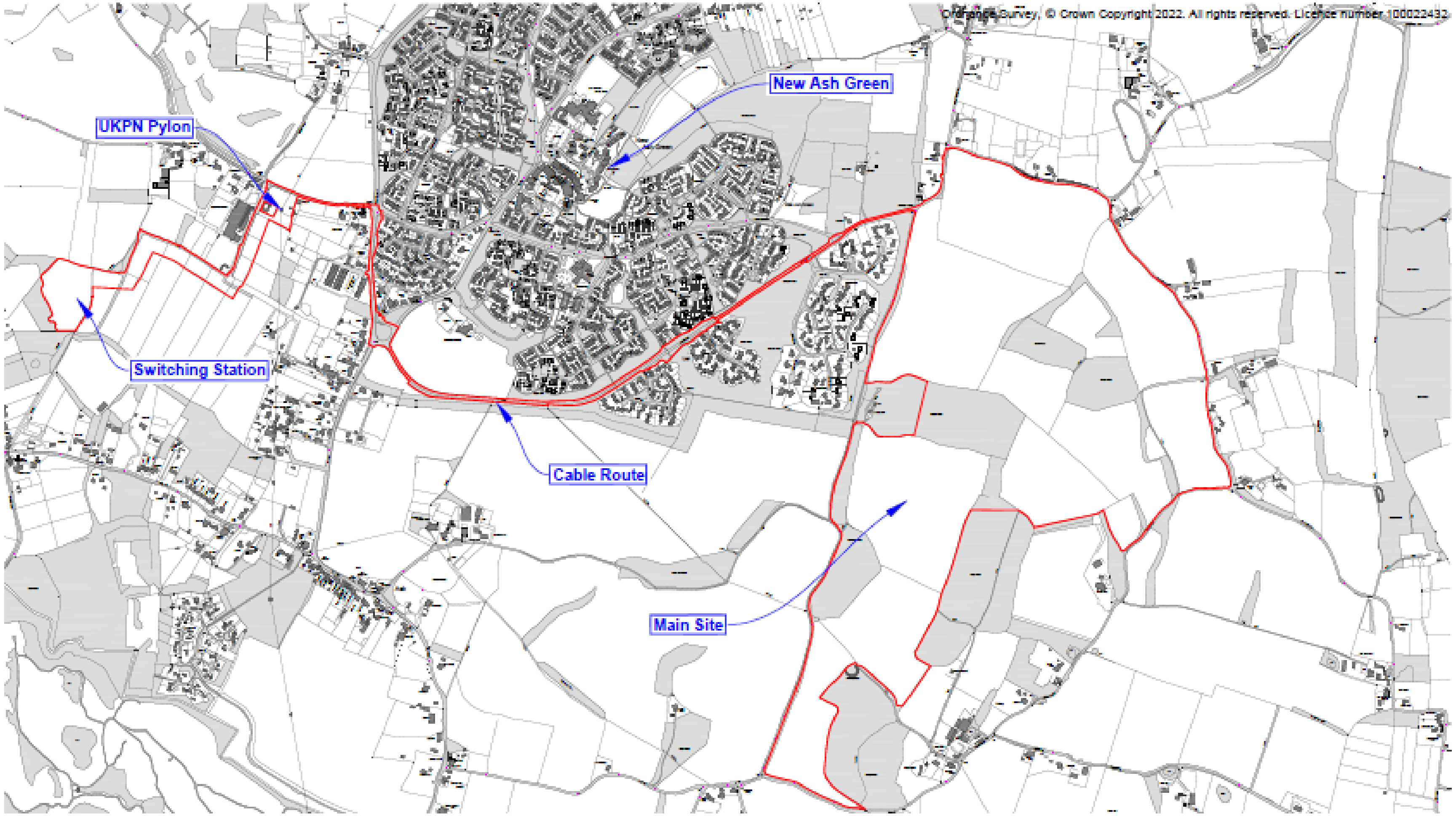
The proposal

- A solar and energy storage project that will operate for 40 years
- Sited on 95ha of land to the east of New Ash Green. Connection to the national grid is via an existing tower located on a 2ha site to the west of New Ash Green
- Located in the north-east of Sevenoaks District – this is the only area that can accommodate the project due to a lack of grid infrastructure and environmental constraints in other areas

Key project benefits

- Contributes to the legally binding requirement to achieve net zero by 2050. This requires decarbonization of electricity generation by 2035 – Labour has committed to achieving this by 2030
- Provides additional source of domestic energy security that is not impacted by gas prices resulting in a reduction in overall power prices
- Provides enough power for 17,200 homes and will save 11,500 tonnes of carbon per year
- Improvement in biodiversity, above the 10% national target
- An inflation-linked community benefit fund of £15,000 per annum inflation linked for 40 years

Project boundary



Site advantages

- ✓ Secured grid connection that has available capacity to allow a project of this size to be delivered quickly following grant of planning permission
- ✓ No statutory landscape, ecological or cultural designations within the site
- ✓ Local topography, together with existing woodland and hedgerows minimises external visual impact
- ✓ Use of land that is not currently intensively farmed for food production
- ✓ Access route that avoids local lanes and the centre of New Ash Green
- ✓ Limited impact on residential properties for a project of this size

Regional advantages (South-east England)

- ✓ High levels of sunlight (irradiation) mean the land required for the same electricity generation output is lower than would be the case further north
- ✓ Located in south-east region, an area of high electricity demand with limited renewable generation

Local community consultation

Consultation (September 2024)

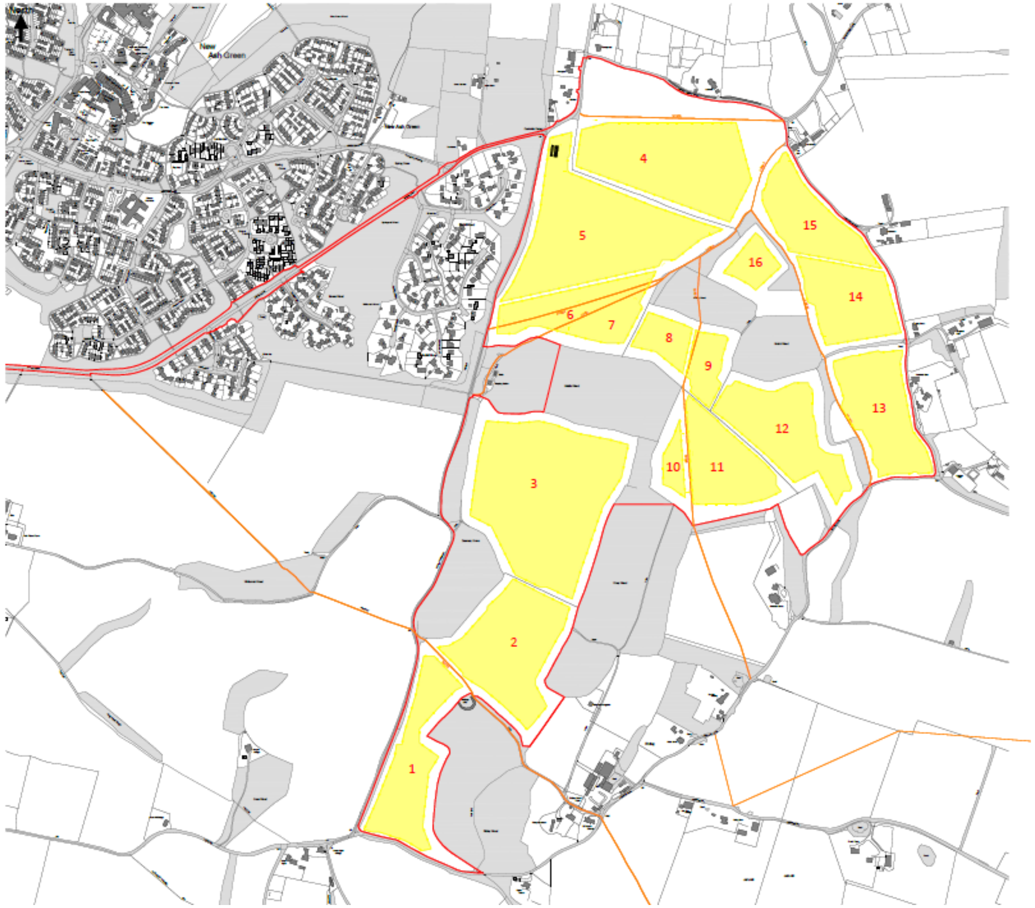
- Voluntary local community consultation
- 1,020 leaflets delivered to homes and businesses
- Newspaper advert placed in Dartford and Gravesend Messenger
- Exhibition event held in New Ash Green with over 120 attendees.
- Presentations to New Ash Green Village Association, Tom Tugendhart MP and the Parish Council/local community during October-November
- Ongoing engagement with key stakeholders including existing Ridley tenant farmer, site area neighbours and local councillors

Our response to concerns raised

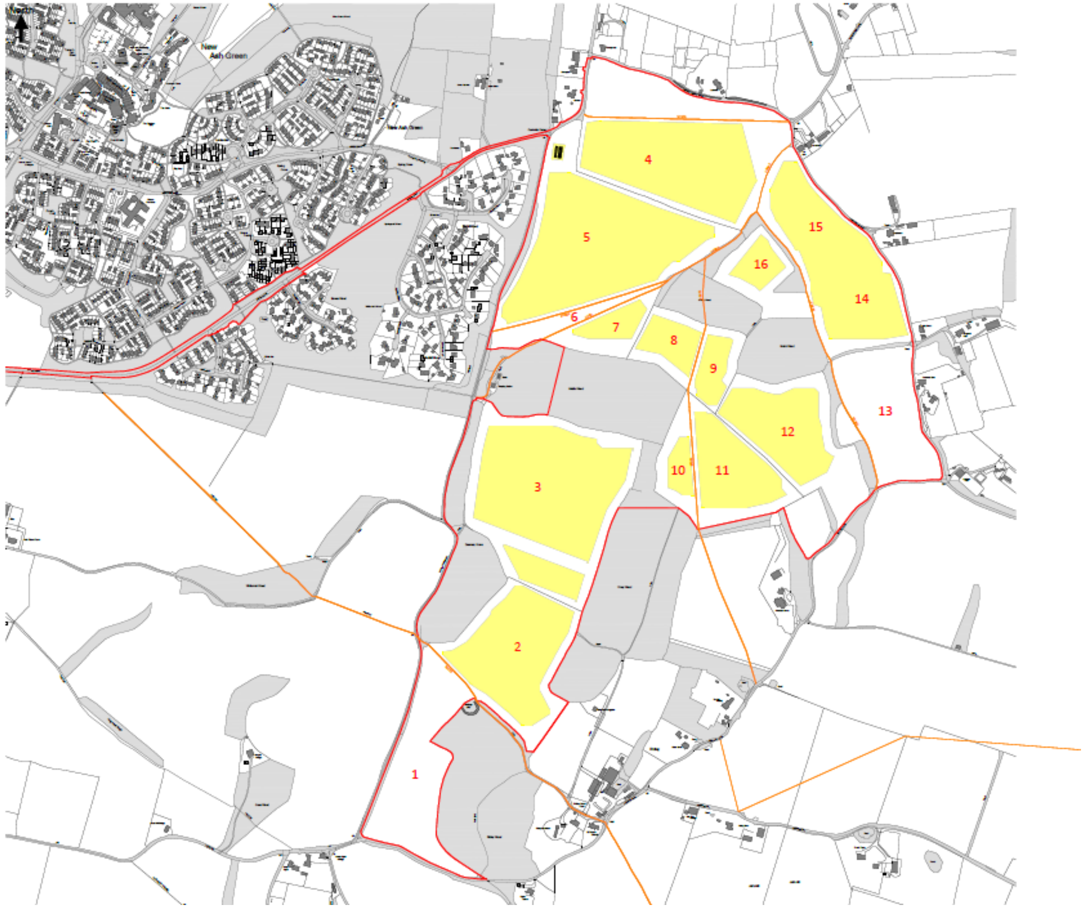
- **Visual impact** – updated design to further reduce any impact outside the site area
- **Traffic** – confirmation that access will be from north-west of the site, avoiding local lanes
- **Noise** – HVAC units for electrical infrastructure located away from the edge of the site area
- **Fire risk** – development will comply with National Fire Chiefs' Council guidelines for battery developments
- **Footpaths** – updated design following input from landscape specialists to limit impacts

Design changes

Original Design



Updated Design



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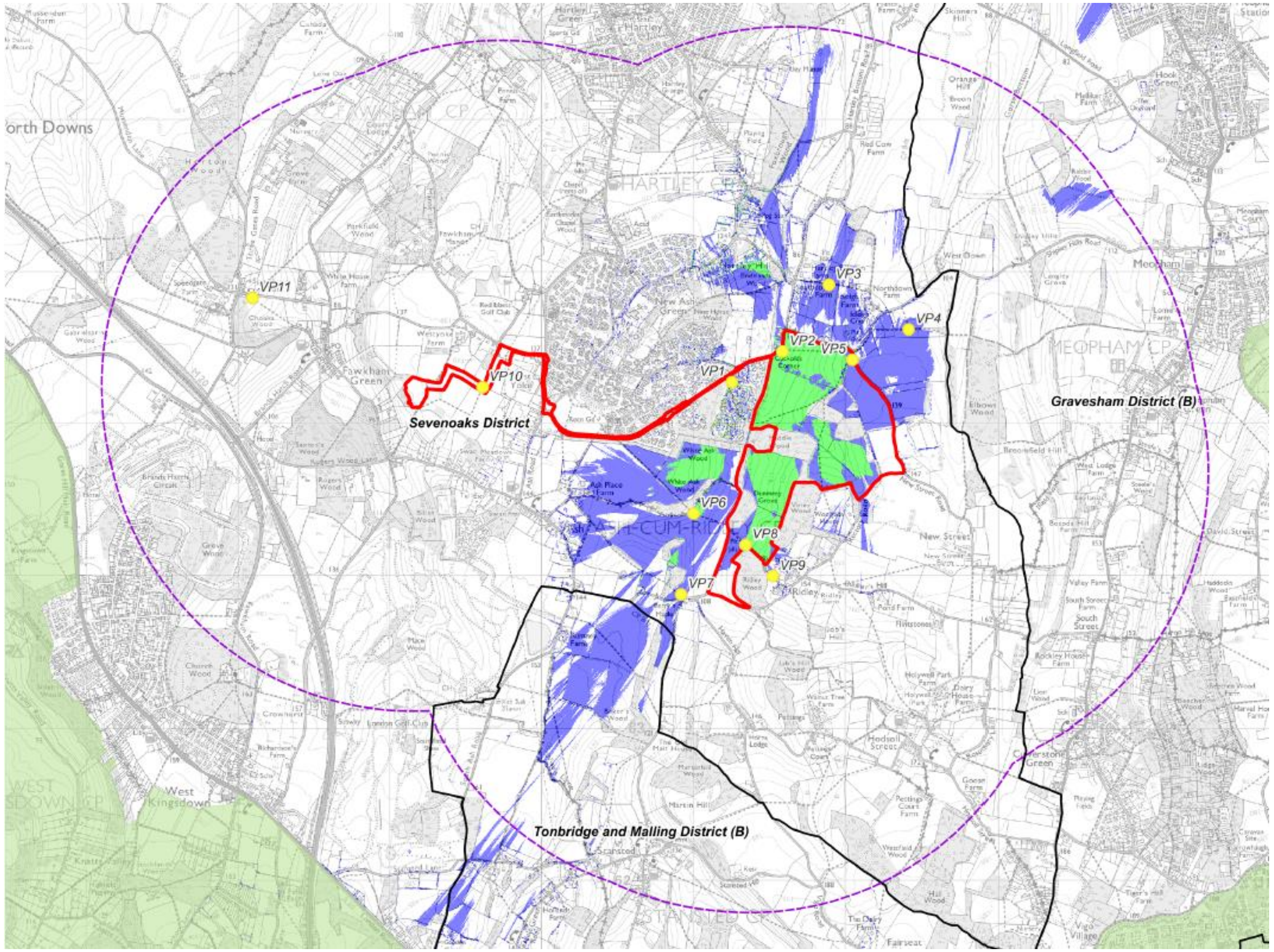
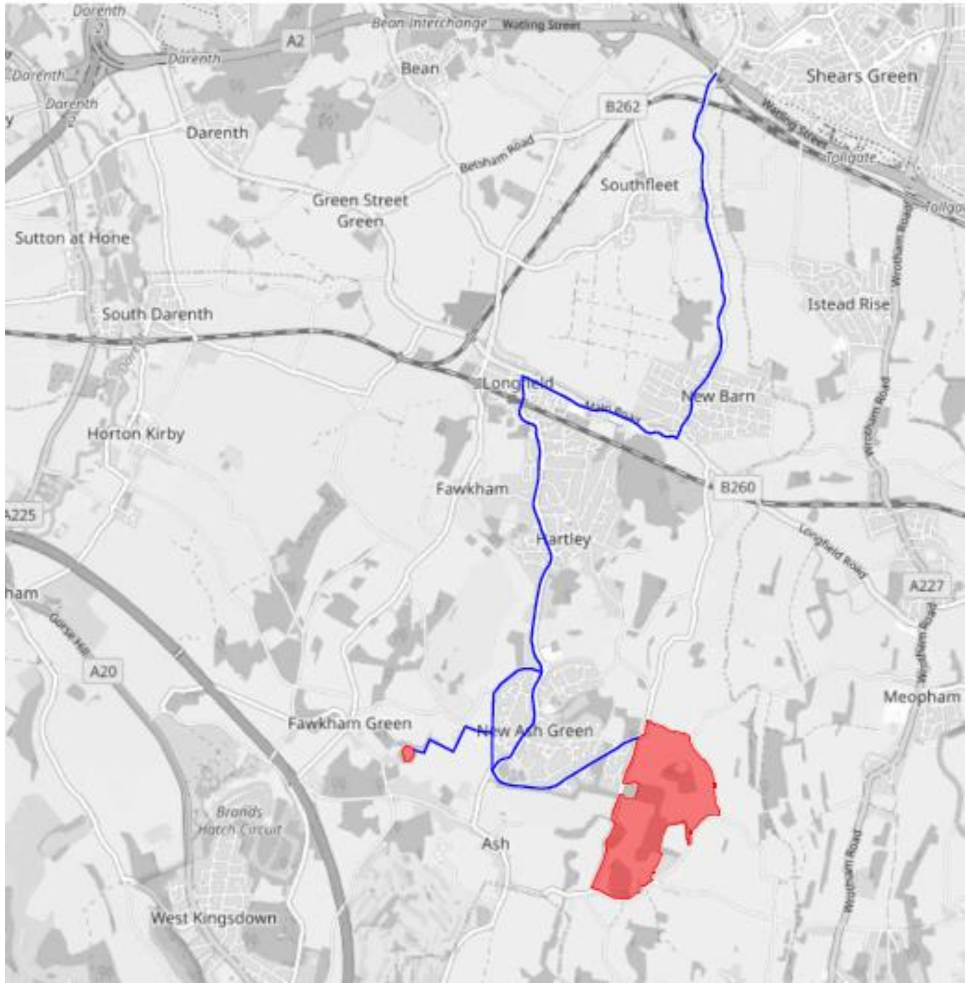
Visual Impact



Site Boundary
2km Study Area
Local Authority Boundary
Kent Downs National Landscape
Viewpoint Locations

Solar Array - Zone of Theoretical Visibility
- Between 1% and 20% of solar panels theoretically visible
- Between 20% and 40% of solar panels theoretically visible
- Between 40% and 60% of solar panels theoretically visible
- Between 60% and 80% of solar panels theoretically visible
- Between 80% and 100% of solar panels theoretically visible

Construction and Traffic

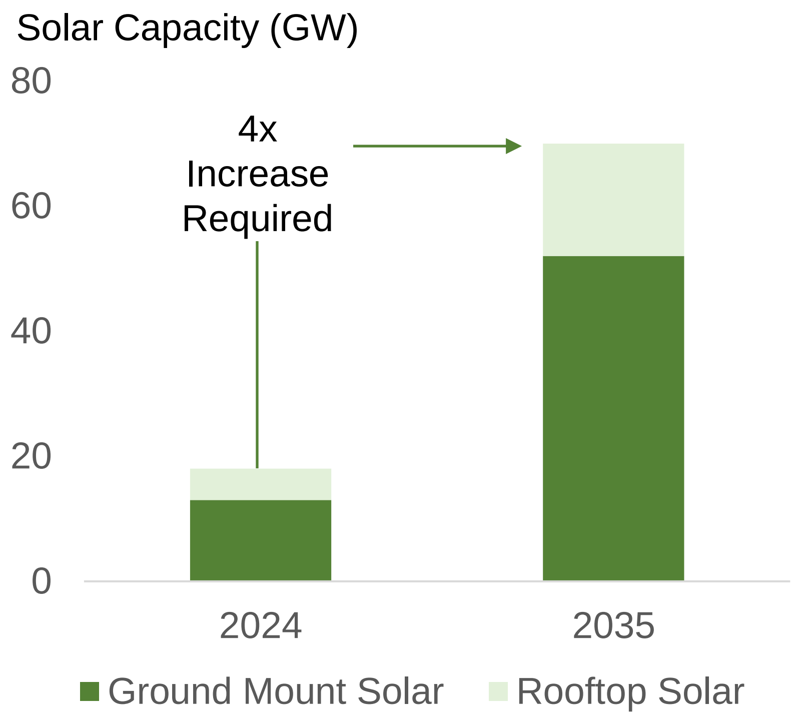


- Expected to take approximately 9 months
- Construction activities will end at 7pm Monday-Friday, 2pm Saturday. No nighttime work expected
- Access will be from North of New Ash Green. Traffic will use Redhill Road to avoid village centre
- Average of 5 HGVs per day (10 two-way trips) expected. HGV deliveries will be scheduled to avoid peak times / school hours
- Evolution Power will agree a Construction Traffic Management Plan with Kent County Council to mitigate and manage any traffic impacts

UK solar - National policy

- Total operational solar in the UK is currently c. 18GW but will need to increase to 70GW by 2035. This will require over 4GW to be installed each year which is more than 5x the average amount installed over the past three years
- To achieve this the previous Government updated the National Policy Statement for Energy (EN-1) and the National Policy Statement for Renewable Energy (EN-3) in January 2024
- The updated statements confirm that
  - there is an **urgent need for significant amounts of large-scale energy infrastructure** and designates solar (and other renewables) as “**critical national priority**” (CNP) infrastructure;
  - The **need for renewable generation is likely to outweigh residual environmental effects** in all but the most exceptional cases;
  - The need for this infrastructure **will outweigh any harm as a result of impact to Green Belt**, impact on nationally designated landscapes, impact on cultural heritage and/or impact on Sites of Special Scientific Interest

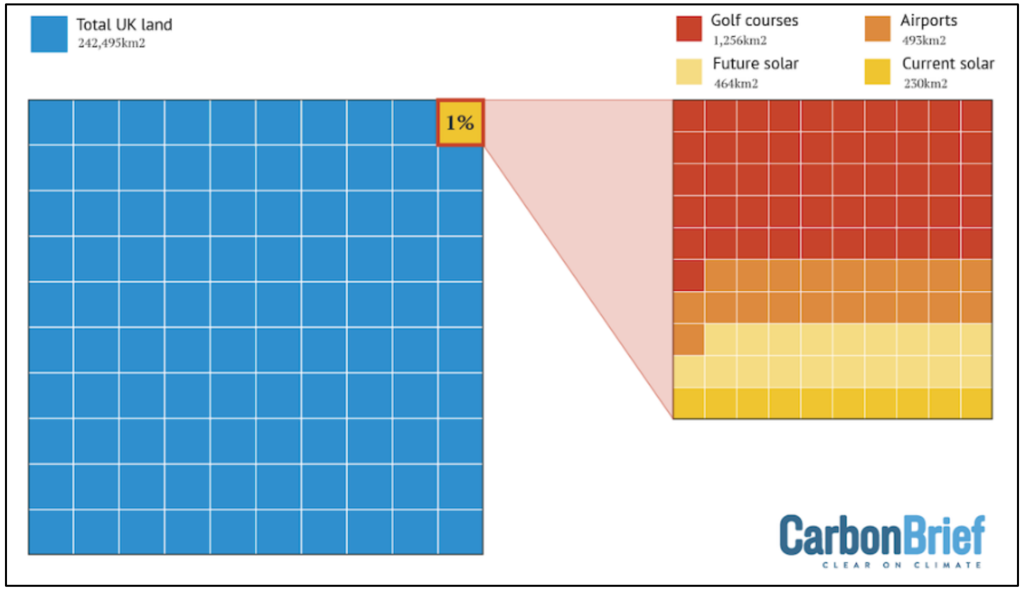
Rooftop / brownfield land opportunities



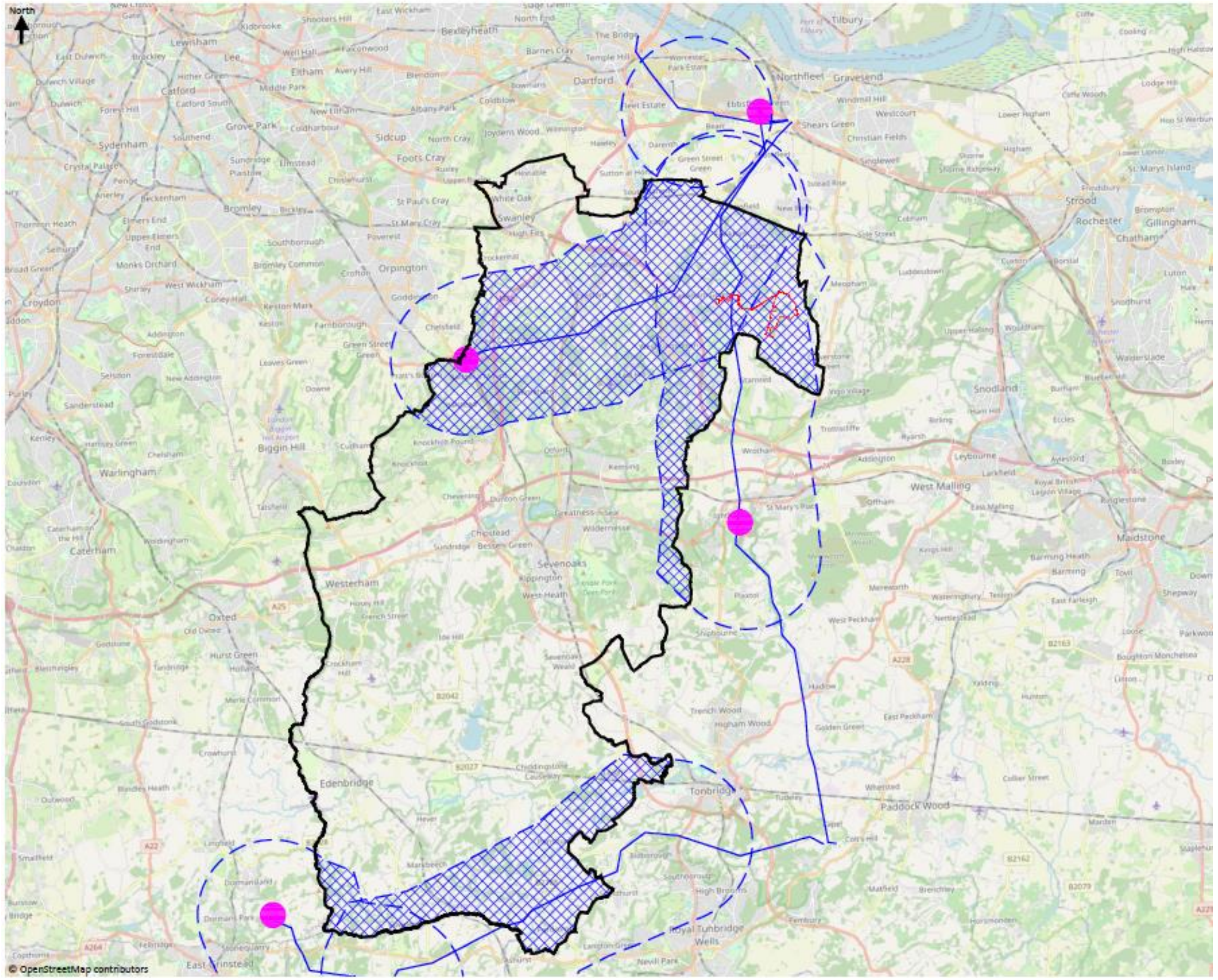
- To achieve net zero the level of solar deployment will need to increase from the current level of c. 18GW to 70GW by 2035
- Of the 18GW deployed since 2010 only around 5GW was on rooftops
- Assuming this ratio is maintained an additional 38GW (or 38,000MW) ground mount solar is required. The New Ash Green project is c. 50MW and is 0.13% of the required increase
- To maintain the ratio requires 14GW of rooftop over the next 10 years – over the past 10 years rooftop installation has averaged around 0.2GW per annum. Rooftop solar is c. 4x the cost of ground mount, many buildings are not suitable and grid connectivity is limited
- Sevenoaks District publishes a brownfield land register which confirms there are no suitable brownfield sites. The largest site is 63ha (c. 65% of the site area) and has planning for 635 residential dwellings; the second largest is 7.5ha (c. 8% of the site area).

UK solar land use / Food security

- Some politicians have publicly suggested that the use of “high value agricultural land for farming” for solar developments could contribute to a food security crisis
- This view is contradicted by Government-led research and published policies
- The Department for Environment, Food and Rural Affairs’ (DEFRA) UK Food Security Report confirms that the UK has a **high degree of food security.** It further confirmed that the biggest risk to UK food production comes from **climate change** and **other environmental issues**
- DEFRA commissioned research concluded that if climate change is not addressed the amount of “best and most versatile” (Grades 1, 2 and 3a) arable farmland will **reduce from 38% today to 11% by 2050**



Location Choice - Grid constraints



Drawing Legend:

- Sevenoaks District Council Boundary
- UKPN 132kV Transmission Line
- Transmission Line 3km Search Area
- Theoretical Grid Connection Areas within Sevenoaks
- 132kV Substation
- New Ash Green Site Area

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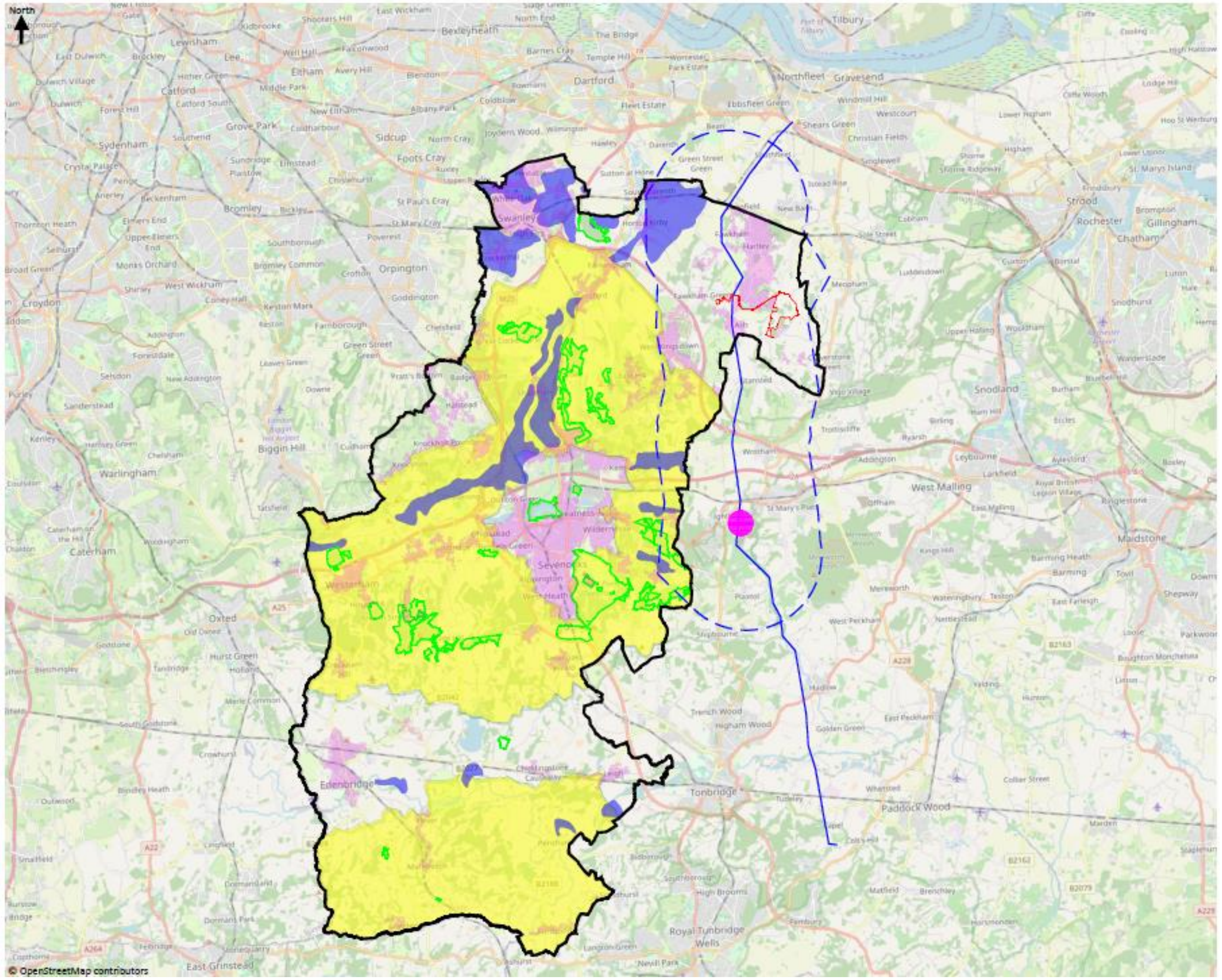
Location Choice - Environmental constraints



Drawing Legend:

- Sevenoaks District Council Boundary
- UKPN 132kV Transmission Line
- Transmission Line 3km Search Area
- 132kV Substation
- New Ash Green Site Area
- Built Up Areas
- National Landscape (AONB)
- Sites of Special Scientific Interest (SSSI)
- Grade 1 & 2 Agricultural Land

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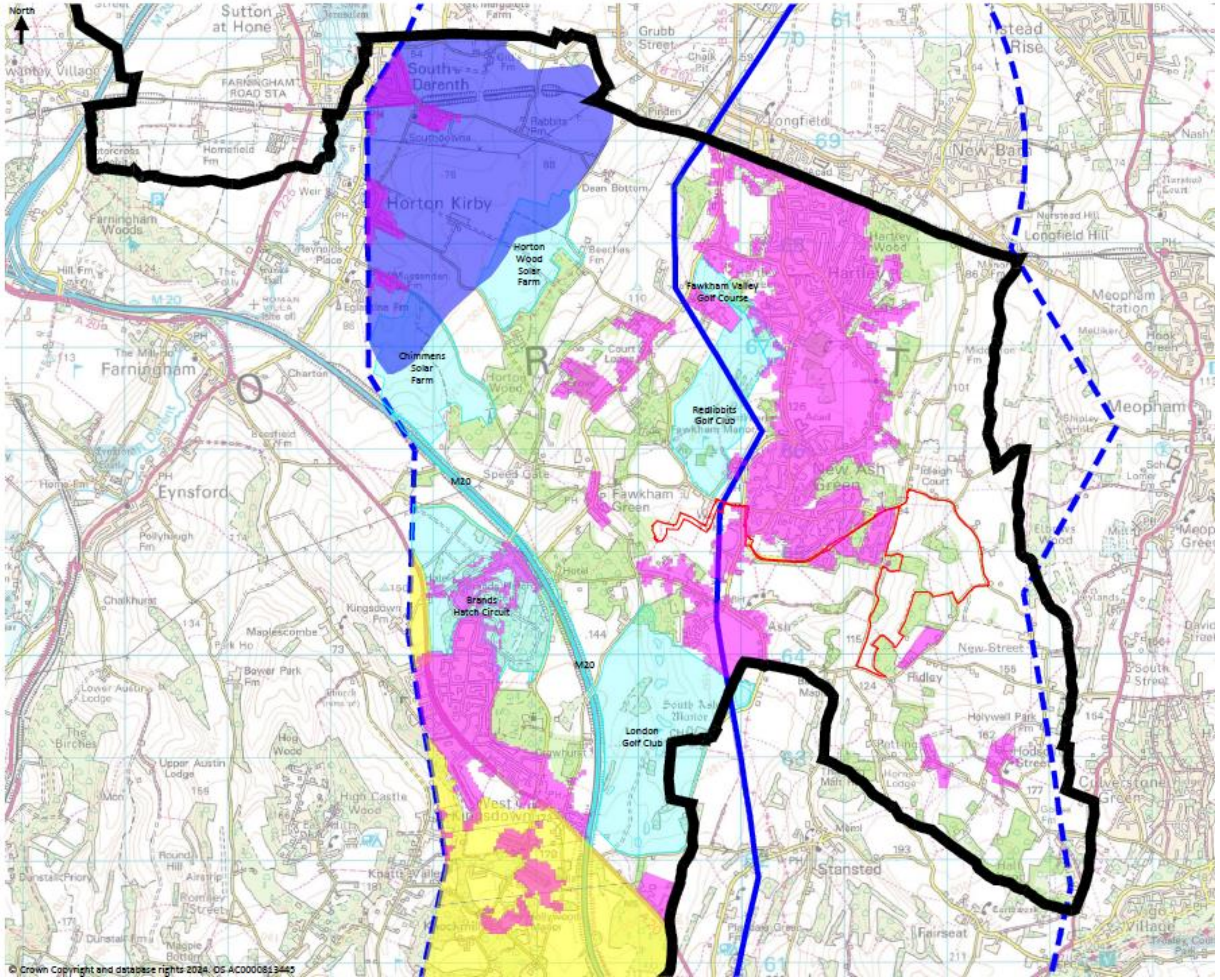
Location Choice – North East Region



Drawing Legend:

- Sevenoaks District Council Boundary
- UKPN 132kV Transmission Line
- Transmission Line 3km Search Area
- New Ash Green Site Area
- Other Constraint (see Plan)
- Built Up Area
- National Landscape (AONB)
- Sites of Special Scientific Interest (SSSI)
- Grade 1 & 2 Agricultural Land
- Areas of Mature Woodland

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Summary

- ✓ The UK has a legally binding obligation to achieve net zero by 2050, which will also provide energy security and lower consumer bills. To achieve this each region needs to contribute
- ✓ There are very limited areas within Sevenoaks District that are suitable for renewable development
- ✓ The proposed site has no statutory landscape, ecological or cultural designations and there is very limited external visibility due to topography and existing woodland which will remain untouched
- ✓ Public rights of way and access will remain unchanged
- ✓ Construction access route avoids local lanes and the centre of New Ash Green to minimise disruption
- ✓ We are working with the existing tenant farmer to ensure this local business can continue
- ✓ Changes have been made since consultation following responses received from the local community
- ✓ A 40 year inflation indexed community benefit fund will be offered to support projects in the local area
- ✓ We want to continue to work with the local community so that we are aware of local views and can respond where possible to make the project as good as it can be

Questions – Community Benefit

- With significant disruption expected—noise, increased traffic, and loss of environment and farming jobs—how does Evolution Power intend to benefit the community?
- ➢ Sevenoaks District Council did not identify any significant environmental effects and there will be no loss of environment or loss of farming jobs. The project delivers a number of community benefits including a substantial business rate contribution, an increase in local biodiversity, opportunities for local employment and £15,000 per annum inflation linked community benefit fund for local projects.

- How much of the energy produced will directly benefit New Ash Green and the surrounding villages? Or will the majority of it be sold on the open market?
- ➢ Electricity will be supplied to the local electricity grid which is managed by UK Power Networks, the regulated distributer for electricity to New Ash Green and other communities within Sevenoaks District.

- The building where this meeting is held has served the community on a volunteer-run, not-for-profit basis since 1979. Will New Ash Green Solar commit to supporting this community hub and other community buildings in the village by installing solar panels on its roofs and assisting with any necessary roof repairs?
- ➢ This would appear to be a good project for the community benefit fund to support.

Questions – Construction

- Will any construction work be conducted at night, and if so, how will noise and disruption be managed?
- ➢ No construction work is proposed at night.

- How long will construction take, and what impact will limited road access have on nearby residents? With an anticipated 40-year operational life, how does Evolution Power justify a potential 5-year build and 5-year dismantle period in terms of carbon reduction, local benefits, and overall disruption?
- ➢ Construction is expected to take approximately nine months in total. The road access impacts is likely to be part-closure of the grid connection route (in phases) while the underground cable is installed. The project will deliver zero carbon renewable energy which is required to enable to the UK to achieve its legally binding net zero obligation and a number of local benefits. It is accepted that there will be a limited level of disruption during construction but once operational any disruption will be negligible.

Questions – Construction

- I am greatly concerned about the route that vehicles will use to undertake the installation of the panels and routing of cables to the switching station, these roads are already severely damaged with pot holes. Hartley Bottom frequently floods. I understand that the claim is no New Ash Green roads will be used but Redhill Road divides Spring Cross, Manor Forstal and Knights Croft from Bowes Wood, Westfield and Redhill Road. Manor Lane is narrow and likewise full of potholes. The disruption will be enormous. Can you let us know which routes will be used and what plans are in place, if any to restore the roads.

- What specific disruptions to local roads are anticipated during the construction phase? Is there a planned route for heavy vehicles, and will there be set hours for their movement to minimize inconvenience for residents?

➢ Construction traffic will arrive from the North of New Ash Green and will use Redhill Road to avoid the village centre. An average of 5 HGVs per day (10 two-way trips) expected with deliveries will be scheduled to avoid peak times / school hours.

Evolution Power will agree a Construction Traffic Management Plan with Kent County Council to mitigate and manage any traffic impacts.

Questions – Developer

- Who owns New Ash Green Solar, and what is their experience with similar projects? What financial assurances, such as performance bonds and insurance, will be in place if planning consent is granted?

- What is their track record of delivering such projects and sustaining the finances necessary for a 40 year tenancy ?

➢ New Ash Green Solar is part of the Evolution Power Group. The Directors of Evolution Power have extensive experience having developed and/or funded over 50 UK solar projects. Once operational solar projects generate sufficient revenues to cover all operational costs, including tenancy costs

- Could Evolution Power provide information on: (i) The number and size of other UK sites it is exploring; and (ii) Its investment in offshore solar, which may have advantages over land-based projects.

➢ Evolution Power has a number of UK projects in development, the majority of which are multiple times larger than New Ash Green Solar. We are not involved in offshore solar.

Questions – Developer

- How many Evolution Power employees live in New Ash Green or nearby villages? Does the company acknowledge local concerns that this is a profit-driven venture with no benefits to the community, threatening our protected Green Belt?

➢ No Evolution Power employees live in New Ash Green.

Evolution Power recognises that projects such as New Ash Green Solar can have local impacts which is why we voluntarily carry out pre-application consultation to provide an opportunity for engagement and input from the local community.

The project has been developed to minimise local impact and deliver community benefits where possible, whilst also ensuring the renewable energy required to help the UK to meet its legally binding net zero target.

Questions – Ecology

- What specific measures are in place to minimize the environmental impact on wildlife, plant life, and habitat connectivity in the area?
- ➢ Solar projects do not result in significant negative impacts on wildlife, plant life or habitat connectivity. The project will deliver numerous ecological benefits including the creation and/or enhancement of modified grassland, other neutral grassland, lowland mixed deciduous woodland, rural trees, and species-rich native hedgerows. Existing woodland on site will be retained, protected, managed and enhanced. Buffer zones of wildflower meadow habitat will be established around the solar arrays and woodland stands to provide habitat resources for invertebrates which in turn will provide habitat for bats, badgers, birds, amphibians and reptiles.

- The woodland within the proposed site contains an active badger sett, and Greater Spotted Woodpeckers and Little Owls nest there. The proposal lacks specifics on how this woodland will be managed—would it be disturbed or removed?
- ➢ No woodland will be disturbed or removed as a result of the project

Questions – Ecology

- Evolution Power mentions encouraging biodiversity but provides no specifics. Given the established biodiversity in this area, how will the project avoid negatively impacting current flora and fauna?
- ➢ The project is legally required to deliver a biodiversity net gain of 10%. No significant impacts have been identified in relation to flora and fauna.

- The site is home to birds of prey such as Buzzards, Red Kites, Kestrels, Sparrowhawks, and multiple owl species (Barn, Tawny, and Little Owls). Although solar farms are said to benefit small mammals and insects, there's little information on impacts specific to raptors. Could Evolution Power clarify: (i) Do solar panels alter ground heat absorption, affecting thermal formation necessary for raptors?; (ii) Would panels covering open ground hinder line-of-sight hunting for visual predators?; (iii) How might panels impact sound-based hunting for owls? What is their acoustic profile?; and (iv) Could disruptions in prey populations lead to increased rodent numbers, and what would the consequences be?
- ➢ Buzzards and sparrowhawks were recorded within the site; the other species noted were not observed. The buffer zones around woodland and the solar arrays and the retained habitats in both the north, south and east remain available for hunting. The habitat improvements will likely support larger populations of prey for both of these raptor species.

Questions – Equipment

- What is the anticipated ratio of UK-manufactured vs. imported equipment for this project?
- ➢ This is unknown but it is noted that the vast majority of solar panel production is in China and South-East Asia. Evolution Power has relationships with UK suppliers of other components, for example the mounting framing, and will seek to engage these local suppliers where possible

- How will the solar panels be disposed of or recycled at the end of the lease? What measures will be in place to prevent them from ending up in landfill?
- ➢ Panels are expected to be recycled at the end of the 40 year project life – dedicated recycling plants are beginning to come online as the first generation of solar panels reach the end of their lifetime. Panels will be removed and disposed of in line with regulation in place, which is likely to include the Waste Electrical Electronic Equipment Regulations, or its future equivalent

Questions – Land Use / Visual Impact

- Evolution Power claims that the site land has been intensively farmed, yet historically it has been used primarily for grazing cattle and sheep. Could the company clarify this discrepancy?
- ➢ It is accepted that the predominant use of the land currently is for grazing cattle.

- New Ash Green is a unique settlement and its setting should be considered even if not statutorily necessary. From nearly every direction New Ash green buildings are not visible from the surrounding countryside which adds to its charm and decreases its impact on the rural area. Its presence should not be utilised to mitigate the impact of this site on a rural farming area with plenty of unspoilt landscapes and walking routes. Will any of these considerations be taken into account when planning permission is sought?
- ➢ Visibility of the project is largely contained within the site boundaries with very limited visibility outside the main site area. Where there is external visibility it is typically limited to less than 20% of the site area. The Landscape and Visual Impact Assessment will consider the impacts of the project on a range of local receptors.

Questions – Location

- Has the developer considered other locations, such as brownfield or grey field sites, instead of using high-quality agricultural land and greenbelt areas?
- Given that the project is in an area of outstanding natural beauty, with productive greenbelt high quality agricultural land,(and not brownfield or grey quality); can clarification be provided whether any brown/grey field sites have been previously investigated for locating the solar farm site ?
- Using productive farmland for solar fields could increase reliance on imported food, adding to the carbon footprint. Why prioritize farmland over locations that are already grid-connected, such as urban car parks, public buildings, or warehouses? Would Evolution Power consider (i) Supermarket car parks, where solar energy could power refrigeration and support local electric vehicle charging; (ii) Integrating solar power into village shopping centre redevelopment plans; or (iii) A shared-benefit scheme, installing panels on local houses, schools, or libraries to directly benefit the community?

➢ There are no brownfield or grey field site areas with Sevenoaks district. The site is not within an area of outstanding natural beauty and is expected to be lower quality agricultural land than other locations in the district. Rooftop solar is part of the solution to achieving net zero but a significant amount of ground mounted solar will be required to increase solar capacity from 18GW to 70GW by 2035.

Questions – Location

- This site requires a multi-mile connection to the national grid, which appears to support placing such projects closer to existing grid infrastructure. With no direct benefits to residents, why not explore a setup that serves local households and businesses, potentially reducing transmission loss and offering better deals for local residents?
- ➢ The project is located approximately 1.5 miles from the connection point, with limited other available land due to the extensive woodland and golf courses. No significant transmission losses will be incurred and the project will deliver a number of local community benefits.

- The loss of greenbelt land is especially troubling, given its proximity to the Kent Area of Outstanding Natural Beauty. What measures will mitigate visual impact on the local landscape?
- ➢ Green belt is a planning designation primarily intended to limit urban sprawl into the countryside. Excluding urban areas the whole of Sevenoaks District is designated green belt and therefore it is not possible to deliver a renewable energy project outside of the green belt within Sevenoaks District.

  The site area is approximately 2.5km from the Area of Outstanding Natural Beauty (AONB) at its nearest point and there is no intervisibility between the site and the AONB. A Landscape and Visual Impact Assessment will be provided to identify any visual impacts on the local landscape.

Questions – Public Rights of Way

- Several local footpaths, which hold significance for residents and families, especially during the COVID lockdowns, traverse the proposed site. Recently, some of these paths have been less maintained, raising concerns about discouragement of use. Could the landowner comment on this? Are there guarantees that footpath access will remain open and unaffected during both construction and operation?

➢ Evolution Power is aware of the importance of local footpaths. Part of the rationale for the removal of the southern field was to limit the impact of the project on the New Ash Green to Ridley route (SD233) which we understand is well utilised.

  No Public Rights of Way will be diverted or extinguished as a result of the project and access will be maintained at all times.

Questions – Other Topics

- Will the developer establish a group to represent and engage with affected villages throughout the project to ensure clear communication and community input?

➢ Evolution Power is committed to continuing engagement with the local community through the project, including via the Ash-cum-Ridley Parish Council and the New Ash Green Village Association. A separate group is not considered necessary.

- Although solar power may help combat climate change, there's an immediate housing crisis locally. Has Evolution Power considered how planning uncertainties affect local property values and marketability? If approved what compensation plans are there for residents negatively affected by this development?

➢ House prices are impacted by a range of factors and there is no evidence to suggest solar development results in significantly lower property values. Impact of property prices is not a material consideration for a planning decision.

- Could you explain why the "Shared Solar" model, which has been successfully implemented by companies like Ripple Energy at sites such as Derril Water Solar Park in North Devon, isn't being used here? What factors led to the decision, and could such a model better benefit the local community?

➢ This is not our preferred commercial approach.

Questions – Other Topics

- Why is this project called "New Ash Green Solar," given that the village doesn't own the land and receives no direct benefits from it? Is the project primarily for the financial gain of Evolution Power, which has no ties to New Ash Green?

➢ The project is located in the vicinity of New Ash Green and we anticipate New Ash Green will expect to participate in any community benefit fund allocation.

- The site sits above a road prone to flooding in Hartley/Ridley Bottom, and footpaths below also suffer from water accumulation, potentially worsened by heavy machinery. Could Evolution Power address: (i) How solar panels might impact water runoff and whether it could damage roads, footpaths, or water management systems in the valley; (ii) Potential risks to the foundations of the solar panels from runoff and (iii) The hydrodynamic effect of impervious solar surfaces on local water flow, particularly considering pumping stations in Hartley Bottom and Idleigh Court?

➢ The site is located in Flood Zone 1, which is the lowest level of fluvial flood risk. Surface water impacts will be considered and mitigated where required but there are no significant effects identified. No risk to the foundations of the solar panels or the identified pumping stations is expected.