Sunnica Solar and Battery Plant

Status Update

30th June 2025

SNTS Community Group

Contents

1) Background

The ca. 2500-acre Sunnica Energy Farm was consented in July 2024, despite it being recommended for rejection by the government's expert planning examiners.

In addition to over 1 million solar panels, it will also include ca. 500MW/2400MWh of lithium-ion battery energy storage (LiBESS) that will rank it amongst the world's largest battery energy storage facilities. The final installed capacity may be greater than this, since Sunnica Ltd argued during Examination that no upper limit should be placed on the LiBESS capacity; consequently, the Development Consent Order (DCO) does not limit this.

Hundreds of Sunnica Ltd's LiBESS containers will be spread across 3 sites (ca. 77 acres): East A next to West Row/Isleham/Mildenhall, East B next to Red Lodge/Freckenham and West A next to Chippenham/Snailwell/Newmarket (see map in ref 11).

As you know, our communities remain deeply concerned about the known risk of LiBESS failure and potential thermal runaway, which results in uncontrollable and intense fire, explosion and release of highly toxic emissions to air/ ground/ water over a wide area for prolonged periods, with potential for longer term environmental contamination.

The Moss Landing (California) LiBESS failure in January this year (the 4th failure at this site in 5 years, despite having "state of the art" safety features) was in a facility of comparable size to Sunnica and resulted in evacuation of some 1500 or so residents over a 6Km/3mile area for several days. The map in ref 11 shows some illustrative 3-mile distances (in this case circular), which help highlight potential impacts on our local area. The Moss Landing fire re-ignited in February, causing further disruption (re-ignition is not uncommon with LiBESS fires).

As well as evacuation, Shelter in Place orders were issued in Moss Landing over an extensive area since the highly toxic plumes were dispersed over some distance (ref 1). Preliminary post-incident analyses are indicating adverse health impacts, potential soil/crop contamination and elevated heavy metals in waterways. We are following this closely.

In the UK alone there have been 3 LiBESS failures already this year; a number expected to rise as more LiBESS come online.

Cases of car transporter ships that have caught fire when lithium-ion batteries in the electric cars on board have ignited have also been reported (e.g. https://www.news.com.au/technology/motoring/crew-abandons-ev-ship-inferno/news-story/ab951ca0748294bd972a15204041462a).

A short briefing note (Appendix 1) written by several UK university professors was circulated earlier this year, highlighting the current issues with LiBESS, and raising concerns about the absence of suitable safety regulations, despite the known risks. Recent academic publications in the *Fire Technology* (ref 2) and *Batteries* journal (ref 3) also demonstrate the impacts of thermal runaway, lack of regulation and potential environmental contamination.

Our community group presented an overview of the current concerns about the absence of government regulation and accountability to MPs at Westminster in March this year (Appendix 2).

2) Lack of Adequate Safety Regulation for LiBESS in the UK. House of Commons debate (5th June 2025)

The recent House of Commons debate (refs 4,5) involved MPs from across the UK and from various political parties who expressed deep concerns about the lack of government safety

regulations for LiBESS, some calling for a pause on LiBESS deployment until their safety can be assured.

Moratoria on LiBESS have already been implemented in a large number of US cities.

In the UK there are no regulations governing how far LiBESS can safely be sited from people, homes, businesses, schools, water supplies, cropland, etc. There are no regulations governing safety measures to ensure their safe installation, operation, and decommissioning. There is no government department with responsibility or accountability for the safety of the wider public and environment in respect of the known hazards arising from the highly toxic plumes from LiBESS failures.

Instead, LiBESS operators in the UK currently 'self-regulate,' which has proven very difficult, given the 100 or so LiBESS failures (ref 6) that have happened across the globe to date.

Supervisor Glenn Church, a senior official involved in the latest Moss Landing incident summed up the current situation, saying that, *"It is obvious that this technology* [referring to LiBESS] *is ahead of both government's ability to regulate it and private industry's ability to control it."*

A number of MPs made reference to the dreadful, and preventable, Grenfell tragedy showing parallels where the risks (in that case with the cladding) were known, yet the hazardous cladding was allowed to be deployed at scale due to lack of proper regulation. In closing the debate on the lack of adequate safety regulation for LiBESS in the UK, MP John Milne said he hoped, *"…that the Minister will not make the same mistake that was made over cladding regulations: let us make this a tragedy that never happens."*

In the US there have been some steps taken towards regulating safety distances for LiBESS in the wake of the most recent Moss Landing incident. A Bill has been drafted that calls for a minimum of 3200ft (ca. 1Km) between LiBESS and sensitive receptors, which include homes, businesses, prime farmland, waterways, etc. (https://trackbill.com/bill/california-assembly-bill-303-battery-energy-storage-facilities/2629360/).

Unfortunately, here in the UK, no government department is looking at appropriate safety distances between LiBESS and sensitive receptors, to the best of our knowledge. There is no regulation on this for our planning authorities to follow, hence our communities and environment continue to be put at risk.

3) Failure and Likelihood

LiBESS failure can occur when the lithium-ion battery cells overheat, overcharge, undercharge, over discharge, etc. They are more likely to fail if damaged or abused. There is also evidence (ref 7) to suggest that the lithium-ion cells can fail due to formation of lithium dendrites.

In the UK there is no regulation preventing the use of second life lithium-ion batteries in LiBESS. Indeed, there is an active global market for second life lithium-ion batteries (e.g. https://www.salvex.com/search/?q=lithium) and, according to world leading experts on lithium-ion battery safety, such second life batteries have been known to be used in LiBESS. Second life batteries present an additional risk as it is difficult to know what they have previously been used for, and if they have previously been damaged in any way.

DNV, a leading lithium-ion battery manufacturer, has said there is an expectation that **at least 1 failure** in a LiBESS will occur over the lifetime of the project; expecting a failure to never occur is unrealistic. Their main objective is to ensure they can "fail safely" (ref 8).

Only *one single cell*, of the hundreds of thousands that will be housed in the Sunnica LiBESS, needs to fail to trigger a thermal runaway incident. Noting also that the lithium-ion battery cells only have a shelf life of around 5-13 years, meaning that wholesale replacement of the battery cells will take place several times over during the Sunnica project lifetime. Not only does this add to the environmental burden of the scheme, and its significant carbon footprint, but it also means that many battery cells will be used over the 40-year period.

As the thermal runaway fires cannot be extinguished, they are generally allowed to burn, thus prolonging exposure to highly toxic and carcinogenic emissions over a wide area, including Hydrogen Fluoride, Hydrogen Cyanide, Hydrochloric acid gas, particulates, etc. Vast amounts of water are used to limit fire spread. These incidents can last for days and weeks.

During the debate on 5th June 2025, some MPs made the point that whether considered infrequent or not, thermal runaway incidents can be catastrophic. Only a single incident can have lasting and damaging impacts not only on the communities, local businesses and the environment but also on the industry itself.

Failures have occurred at LiBESS sites during construction, commissioning and operational phases of development. Many such incidents have occurred in newer facilities (with "accredited" safety features).

Local MP Charlotte Cane is running a petition calling for the government to urgently bring in adequate regulations for LIBESS safety (https://www.ecld.org.uk/campaigns/safety-of-battery-storage-sites).

4) <u>Remote Operation and Sabotage, Theft and Vandalism</u>

The Sunnica LiBESS facilities will be operated remotely. Local MP Nick Timothy has raised concerns about these being potential targets for sabotage.

Energy sites can be a target during times of hostility, and the UK has recently warned of 'grey zone attacks' on energy, food, communications systems etc.

Recent press reports have also circulated about potential sabotage and vandalism at substation compounds (e.g. *"Britain's substations are bursting into flames. The reason might be more worrying than the Russians"* https://www.telegraph.co.uk/gift/96bd5d1d7fd1b9c7 . Each of the 3 LiBESS sites will be co-located with extensive substation compounds.

The EPRI report (ref 9) and Significant Incident Report (ref 10) into the Liverpool LiBESS fire a few years ago demonstrates the catalogue of errors that can ensue with remotely operated sites, especially worrying when dealing with LiBESS failures which our local fire and rescue services (FRS) have confirmed they are not resourced to deal with. During the Liverpool incident, Merseyside FRS was unable to rouse the operator in Denmark until over an hour after the incident began (it happened in the night). The risks to the surrounding area from highly toxic and potentially carcinogenic emissions were not identified until ca. 2 hours after it began, thus exposing the public to toxic fumes before being told to shelter in place. It took around 59 hours and ca. 2 million litres of water to eventually bring the fire under control (unfortunately the contaminated firewater was not contained and was allowed to seep into the surrounding area).

LiBESS and rural solar sites are also targets for theft and vandalism. During the scoping phase for the Sunnica project, Cambridgeshire Designing Out Crime Officers warned of repeat attacks by organised crime gangs on energy parks in this region.

5) Local LiBESS Projects – Sunnica Energy Farm

Our local fire and rescue service in Suffolk (SFRS) consider LiBESS 'an emerging risk.' They have called for more regulatory powers. Both SFRS and Cambridgeshire FRS (CFRS) do not have the resource to deal with such incidents; CFRS have said that they do not have the resource or technical know-how to properly comment on the safety of Sunnica's LiBESS design - yet they are charged with signing off Sunnica Ltd's crucial Battery Fire Safety Management Plan (BFSMP, see next section 6 for details of this). In any case, there is no regulatory standard as to what a 'safe design' might look like, so no regulatory standard that they can refer back to.

The Health and Safety Executive made it clear during the Sunnica examination that they do not review battery fire safety management plans, so this leaves the FRS and the councils without regulatory input from them on this matter.

The three Sunnica LiBESS sites are shown in yellow on the map in ref 11. All are within close proximity to homes, businesses, schools, prime cropland. The LiBESS site near Red Lodge (East B) sits above a high-pressure gas pipeline, despite the known explosion hazard they pose and extreme heat during thermal runaway (as high as 1000 degrees Celsius).

All three sites sit above aquifers so the potential for water contamination is very real, highlighted in the map in ref 12. Sunnica Ltd proposed 410m^3 of contaminated water storage per site, which is considered insufficient when looking at water volumes used to deal with the Liverpool LiBESS failure in 2020 (required ca. 2 million litres water for a ca. 20MW facility) or West Yorkshire FRS's advised 5.5 million litres water for a 50MW LiBESS site (ref 13) etc.

There is a risk of large volumes of contaminated water seeping into the aquifers that supply local villages, farms, as well as the city of Cambridge.

Our communities have long maintained that the now consented LiBESS locations are not suitable from a safety point of view. Sunnica Ltd should have been asked to consider other more suitable locations for their LiBESS. In a scheme area of some 2500 acres, with 77 acres set aside for LiBESS, there should have been other, safer, options for the battery storage.

6) Discharge of Planning Requirements for Sunnica Ltd

Now that the scheme has been granted, it falls to our local councils Suffolk County Council (SCC), West Suffolk District Council (WSC), Cambridgeshire County Council (CCC) and East Cambridgeshire District Council (ECDC) to have the final 'sign off' of the Requirements (like planning conditions) for the delivery of the Sunnica scheme.

Having met with SCC, CCC and ECDC recently, we understand they are currently waiting for discharge documents from the applicant, Sunnica Ltd.

The slides in refs 14-17 prepared by ECDC show the Requirements and which council is responsible for discharging these.

There is NO legal obligation for the councils to consult with third parties when discharging a Requirement unless they are named in the Development Consent Order.

This includes NO legal obligation for them to engage with parish councils or communities when signing off battery safety and other matters.

SCC have a discretionary policy to notify some of the Suffolk parish councils when applications for discharging NSIP Requirements are submitted by the applicant. As far as we

understand it, CCC does not notify Cambridgeshire parish councils regarding discharge, meaning that the Cambridgeshire parish councils may not even be aware that Requirements are being discharged.

Parish/town councils would need to request notifications.

LiBESS safety has always been a huge concern amongst our communities and involves 2 main areas:

a) The Battery Fire Safety Management Plan (BFSMP). This falls to SCC and CCC to sign off, in consultation with CFRS and SFRS (see previous comments in section 5). It is a vitally important document which details the design and layout of Sunnica's LiBESS sites, the water supplies, safety features, emergency access routes etc. It should also be expected to include the Emergency Response Plan, with evacuation and emergency response protocols, etc.

   Sunnica Ltd submitted an outline BFSMP during examination which was reviewed by world leading expert on lithium-ion battery safety, Professor Paul Christensen, who declared the plan **unfit for purpose**. The DCO provides for the final BFSMP to be "substantially in accordance with" this unfit for purpose outline BFSMP. This is a huge concern.

   In addition to the BFSMP, the Examining Authority remained unconvinced by the toxic emission assessments made by Sunnica Ltd; this will require far more substantial assessments to be made.

   Proper consideration of the explosion hazard is also needed (particularly given the location of one of the LiBESS sites being above a high-pressure gas pipeline).

b) Hazardous Substances Consent (HSC). Given the significant capacity of the Sunnica LiBESS they will undoubtedly require HSC. Barristers acting for the councils and those acting for the community reviewed extensive evidence during the Sunnica examination and also concluded that HSC would be necessary. Responsibility for requesting and granting or refusing HSC falls to the district councils - WSC and ECDC.

   During the scoping stage the Health and Safety Executive (HSE) instructed Sunnica Ltd to consult with the relevant Hazardous Substances Authority (i.e. WSC and ECDC) on HSC matters, since they foresaw that HSC would likely be needed

   (the HSE instruction at the time was seemingly dismissed without evidence by the applicant: https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/EN010106/EN010106-004252-6.1%20Chapter%2016%20Other%20Environmental%20Topics%20%5bTRACKED%5d.pdf).

   As of the date of this update report, Sunnica Ltd has not yet submitted an application for HSC to the district councils.

   The BFSMP should be expected to be considered alongside the application for HSC.

According to the Energy Institute guidance on battery storage planning (ref 18), developers should, "*Calculate the total mass of active materials on the sites and refer to the limits given in the legislation. Because battery storage involves chemical/electrochemical reactions, the materials in the charged and uncharged states should be considered.*"
And
"*Developers should also check that in the event of a fire, explosion or other event, the total mass of released by-product materials is below the threshold limits*" .

Sunnica Ltd has yet to provide such information.

7) Who is Consulted and Timelines

The timeline for discharging Requirements is incredibly tight. Once the applicant submits discharge documents, the county and district councils only have 56 days to discharge. This includes reviewing the documents, consulting with others, requesting any additional information needed and drawing conclusions. If they do not meet this deadline the consent is granted (deemed consent). The planning officers may even have to deal with multiple discharge applications at the same time.

As mentioned in section 6, there is *no* legal obligation for the councils to consult with parish or town councils, or any other 3rd party, when discharging a Requirement, unless they are named in the Development Consent Order.

SCC does have a discretionary policy to notify parish councils in Suffolk (but not Cambridgeshire) when they receive a discharge application from the applicant.

CCC does NOT have such a policy.

Since the parish and town councils will *not* automatically be consulted by all councils on matters of battery safety (or other requirements on heritage, ecology, transport, etc - see section 8), the parish and town councils may wish to consider contacting the county and district councils to discuss options to have their views reasonably taken into account *before* the applicant submits their discharge documentation (**i.e. this should be done sooner, rather than later, given the very tight timelines**).

Just because consent for the scheme has been granted, it does not follow that any installations should put our communities or environment and wildlife at risk.

In the case of the Cleve Hill NSIP solar and battery plant, their local council (Swale Borough Council) invited comments from the public on the battery fire safety management plans during the discharge process, and held an emergency planning committee meeting before making their decision on whether to accept or reject it. They allowed public scrutiny of this key document, even with the tight timelines.

8) Heritage, Ecology, Transport and other Matters

Part of the consented Sunnica solar and battery scheme area includes the Isleham B50 plane crash site, where 12 heroic airmen (11 USAF and 1 RAF) sacrificed their own lives by staying on board their failing aircraft in order to save the village of Isleham and its residents.

Speaking at last year's memorial service (ref 19) on the 75th anniversary of the tragedy, Colonel Joshua Arki of RAF Lakenheath recognised the incredible sacrifice of the US 65th Bomb Squadron of the 43rd Bomb Group, and how this tragedy shaped the village of Isleham and those who witnessed it, as well the families who suffered losses. He said:

"We hear our politicians, we hear our military leaders speak about the UK-US relationship and the ties that we have and the alliance that we have, but its events like this, commemorations like this, stories such as the courage that these men displayed when they veered away from the town in order to save the lives of the people and give up their own lives, that's what really cements the relationship between our two great nations."

This local "war grave" has been preserved for decades; families of the lost crew members still come to visit the crash field to this day to reflect and pay their respects. Artefacts from the scattered remains of the plane crash can still be found in the soil, since the aircraft exploded (it was loaded with bombs) and scattered remains over a wide area.

Since consent to develop over this crash field has now been granted, Sunnica Ltd will be permitted to cover over the crash site field with solar panels (with the exception of one of the several crater sites that formed when the huge plane came down, which is planned to be kept panel-free as a small 50m 'exclusion zone'). The perimeter of the crash field will be fenced off and surrounded by mitigation planting to obscure the fencing and solar panels (Figure 1, ref 20). The currently open, agricultural field that has been preserved for decades and is visually accessible to all, and physically accessible with landowner permission, will be hidden and inaccessible.

The discharging of the Requirements regarding this historic military site falls to CCC, in consultation with Isleham Parish Council. There is no legal obligation for CCC to consult with any other party.

Other well-evidenced negative impacts of the Sunnica scheme on our local wildlife, environment and heritage will also fall to our councils to mitigate as best they can within the confines of the DCO (see refs 14-17 for an overview of responsibilities). This includes, but is not limited to:

- Provisions for rare and protected farmland birds, including stone curlew. These were shown during examination to be inadequate, so will require rigorous scrutiny
- Impacts on the Lea Brook / River Lark chalk streams and the rare and protected species within these
- Impacts of thousands of heavy vehicle movements during the construction and decommissioning phases on our local roads
- Closures/ re-routing of PRoW and safety of non-motorised users who use the local roads and routes for recreation (walking, jogging, horse riding, cycling etc) and will face large numbers of HGVs etc
- Impacts on landscape, changes to the character of the area
- Impacts of perimeter fencing (Sunnica plan to use 'deer fencing' to reduce the visual impact, but could potentially look to change this to higher security fencing, which would have a far greater visual impact and should require a revised Environmental Impact Assessment)
- Impacts on heritage assets including the world-famous Limekilns gallops, that the ExA agreed could not be mitigated.
- Impacts on the historic Icknield Way and the abundant wildlife, including rare protected species, that thrives along this treasured route.
- Negative socio-economic impacts to the region

etc

Should the parish and town councils wish to ensure the views of their parishioners regarding the above, and any other matters, are reasonably taken into account, they

would need to contact the county and district councils to discuss options to do this (see refs 14-17 for the responsible authority).

9) Questions and Actions

Please would you tell us:

- Will the parish and town councils request that the county and district councils might reasonably take their views (representing the concerns of their communities) on the various Requirements into account?

- Will the parish and town councils carry out a comprehensive risk assessment of the consented Sunnica LiBESS sites and the impact on the area?

- Will they help develop evacuation protocols (from businesses, homes, schools etc) in the event of a LiBESS failure?

- Would any safety equipment (breathing apparatus etc) be issued to those nearby to enable safe evacuation when the LiBESS fail? Who would cover the cost of this?

(*Noting the incident in Montreal, Canada, last year when a shipping container filled with lithium-ion batteries caught fire showed the lack of preparedness as first responders wearing full protective equipment and breathing apparatus walked the streets asking residents to evacuate with full exposure to the highly toxic fumes, or shelter in place and to monitor their health (https://www.cbc.ca/news/canada/montreal/montreal-lithium-battery-fire-concerns-1.7336652*)

- How will residents be prepared for and alerted to such incidents?

- What steps can be taken to prevent long term environmental contamination?

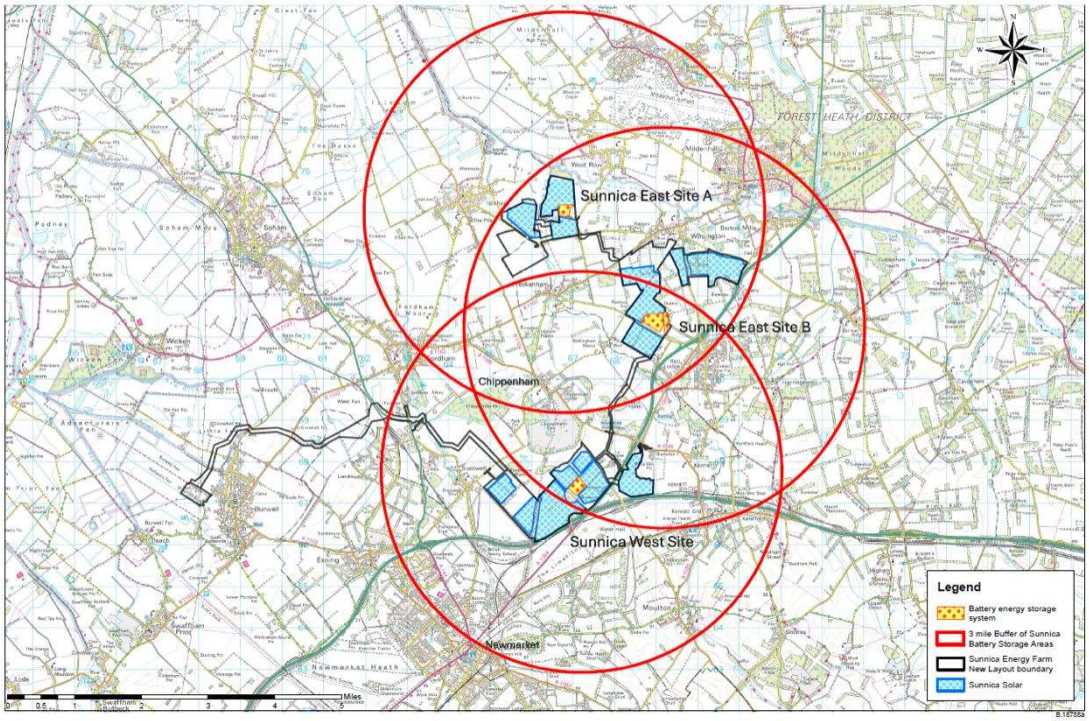
References

1) Moss Landing LiBESS failure, California 16Jan2025. Highly toxic plumes extended well over 1Km. Evacuation zone stretched for approx. 6Km.

Smoke and flames are seen from Castroville as a fire at the Vistra battery storage plant burns in Moss Landing, Calif., on Thursday, Jan. 16, 2025. (Doug Duran/Bay Area News Group)

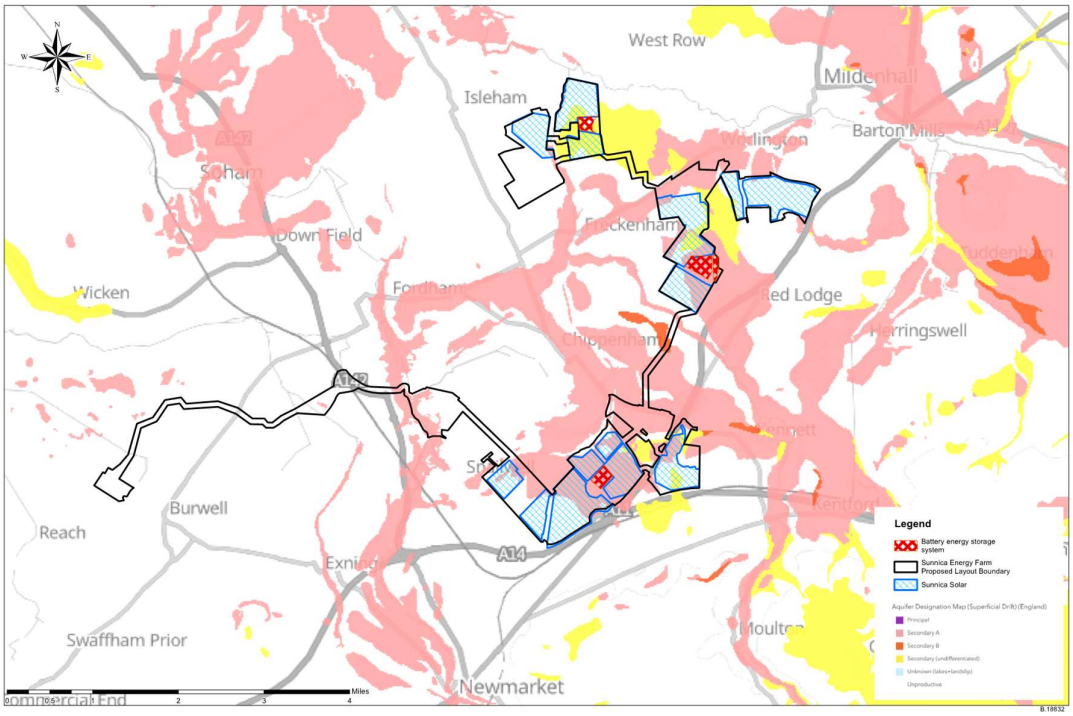
2) Fire Technology paper. *Remarks on the Safety of Lithium -Ion Batteries for Large-Scale Battery Energy Storage Systems (BESS) in the UK*, Prof Edwards et al: December 2024. https://link.springer.com/article/10.1007/s10694-024-01682-x
3) Water contamination paper: *Assessment of Run-Off Waters Resulting from Lithium-Ion Battery Fire-Fighting Operations*, Bourdes et al. March 2024: https://www.mdpi.com/2313-0105/10/4/118
4) Parliament TV link to House of Commons debate on the lack of adequate safety regulations for LiBESS 5th June 2025 (starts around 15:30): https://parliamentlive.tv/Event/Index/128d5ba5-4ca2-47aa-9e1e-f82675eb8f12
5) Hansard transcript of House of Commons debate on the lack of adequate safety regulations for LiBESS 5th June 2025: https://hansard.parliament.uk/Commons/2025-06-05/debates/69C88AD8-77F8-4F85-A934-2DA4AFCCB24B/BatteryEnergyStorageSitesSafetyRegulations
6) https://storagewiki.epri.com/index.php/BESS_Failure_Incident_Database
7) Investigation report into McMicken LiBESS failure in Arizona 2019. https://www.aps.com/en/About/Our-Company/Newsroom/Articles/Equipment-failure-at-McMicken-Battery-Facility
8) "Best practices for battery energy storage system safety around the globe" webinar. DNV GL, Nov 2020
9) EPRI investigation into Liverpool Carnegie Rd LiBESS fire and explosion, Sept 2020: https://www.epri.com/research/products/000000003002026396
10) Significant Incident Report, Carnegie Rd LiBESS thermal runaway incident. https://hawkchurchactiongroup.com/wp-content/uploads/2022/04/BESS-Fire-Significant-Incident-Report.pdf
11) Sunnica scheme area with LiBESS sites in yellow. Red circles show illustrative 3-mile radius from the LiBESS sites:

Sunnica solar and battery map with indicative example of a 3-mile evacuation / toxic plume dispersion zone following a lithium ion battery fire



12) Sunnica scheme map, red/yellow boxes are the LiBESS sites above key aquifers

Sunnica Energy Proposed Solar Farm & BESS Sites - Aquifer Designation Map



13) https://hawkchurchactiongroup.com/wp-content/uploads/2023/06/West-Yorkshire-Fire-Rescue-BESS-Statement.pdf

14) ECDC community engagement meeting slides Feb 2025. Sunnica Works permitted:

What did the Sunnica DCO permit?

The approved nationally significant infrastructure project comprises **"up to one generating station with a gross electrical output capacity of over 50 megawatts"** – this is made up of several different phases (all with sub-phases) as follows:

Work No.1 – ground mounted solar photovoltaic generating station

Work No.2 – energy storage facility of up to 500 megawatts at point of grid connection

Work No.3 – onsite substations

Work No.4 – laying of electrical cables

Work No.6 – works to create, enhance and maintain green infrastructure

Work No.7 – temporary construction laydown areas

Work No.8 – warehouse buildings and compounds

Work No.9 – works to existing streets

Work No.10 – works to create and maintain stone curlew reserve

NB: Work No. 5 is marked as 'not used' within the DCO.

East Cambridgeshire District Council

15) ECDC community engagement meeting slides Feb 2025. Other permissions:

What else does the DCO allow?

- Can fell or lop any tree or shrub near development if necessary to carry out development.

- Can fell or lop any tree covered by a Tree Preservation Order (TPO) near development if necessary to carry out development. There is no requirement for replacement.

- Works to streets/roads, Public Rights of Way (PRoW) closure and alterations, protective works to buildings (i.e. underpinning), right to survey and investigate land, compulsorily purchase land, override easements of land, temporary use of land for construction/maintenance of development and disapplication of other legislation. This list is not exhaustive.

16) ECDC community engagement meeting slides Feb 2025. Requirements that fall to the district councils – ECDC and WSC - to discharge.
Note that the need for Hazardous Substances Consent, HSC (see section 6) is not listed here as it was determined that this would be decided outside of the examination/DCO process. HSC falls to the district councils ECDC and WSC to determine, since they are the Hazardous Substances Authority.

Sunnica DCO 'Requirements' - Schedule 2 of the DCO

DCO 'requirements' are similar to planning conditions, and require approval, agreement or confirmation from the relevant planning or county authority prior to development being carried out. The following requirements are the responsibility of **East Cambridgeshire District Council** and/or **West Suffolk Council** to determine.

Requirement	Who is responsible for 'discharge'	Who must be consulted?
3 - Phasing And Date Of Final Commissioning	ECDC and WSC	N/A
5 - Approved Details And Amendments	All relevant authorities as defined by each 'requirement'.	N/A
6 - Detailed Design Approval	ECDC or WSC or both	N/A
8 - Landscape Ecological Management Plan	ECDC or WSC or both	Natural England Historic England
10 - Stone Curlew	ECDC and WSC	Natural England
11 - Fencing And Other Means Of Enclosure	ECDC or WSC or both	N/A
14 - Construction Environmental Management Plan	ECDC or WSC or both	Local Highways Authority Natural England Environment Agency
15 - Operational Environmental Management Plan	ECDC or WSDC or both	Local Highways Authority Natural England Environment Agency
17 - Operational Noise	ECDC or WSC or both	N/A
18 - Ground Conditions	ECDC or WSC or both	N/A
20 - Skills, Supply Chain And Employment	ECDC or WSC or both	N/A
21 - Permissive Paths	ECDC or WSC or both	N/A
22 - Decommissioning And Restoration	ECDC or WSC or both	N/A

East Cambridgeshire District Council

17) ECDC community engagement meeting slides Feb 2025. Requirements that fall to the county councils SCC and CCC:

Sunnica DCO 'Requirements' – County Council

The following requirements are the responsibility of Cambridgeshire County Council and/or Suffolk County Council to determine.

Requirement	Who is responsible for 'discharge'	Who must be consulted?
5 - Approved Details And Amendments To Them	All relevant authorities as defined by each 'requirement'.	N/A
7 - Fire Safety Management	Cambridgeshire County Council AND Suffolk County Council	Cambridgeshire Fire and Rescue Service Suffolk Fire and Rescue Service Environment Agency
12 - Surface And Foul Water Drainage	Cambridgeshire County Council or Suffolk County Council or both	ECDC or WSC or both Relevant Internal Drainage Board Anglian Water
16 - Construction Traffic Management Plan And Travel Plan	Cambridgeshire County Council or Suffolk County Council or both	N/A
19 - Water Management Plan	Cambridgeshire County Council or Suffolk County Council or both	ECDC or WSC or both Relevant Internal Drainage Board
23 - Crash Site Exclusion Area	Cambridgeshire County Council	Isleham PC (if licence obtained)
24 - Prow	Cambridgeshire County Council or Suffolk County Council or both	N/A

18) Energy Institute guidance (note: this is not regulation): https://www.energyinst.org/technical/publications/sectors/power-generation-other/battery-storage-guidance-note-1-battery-storage-planning14)
19) Order of Service – 75th anniversary of B50 crash in Isleham

20) Proposed development of the field where the B50 tragically crashed, exploded and scattered (over ca. 5 acres). The triangular-shaped crash field is at the edge of Isleham village. This field will be developed over with solar panels and inverters, with the exception of the small 50m exclusion zone (pale blue box). The entire field will be fenced off, and will have screening planting around the perimeter.

Appendix 1

Briefing Note by Professor Dobson et al

BRIEFING NOTE: LITHIUM-ION BATTERY ENERGY STORAGE SYSTEMS (LiBs)

February 2025

Battery Energy Storage Systems (BESS) – the issues

The currently adopted renewable energy drive has created major issues for power distribution and energy security. Not only is there a requirement for massive changes to cable and sub-station infrastructure to distribute the electricity from these additional sources, but because renewable power is intermittent and not very predictable it is now necessary to install very large electricity storage systems. This poses a new problem.

When fossil fuels were dominant the energy was stored in coal heaps, oil and gas tanks *before* combustion and electricity generation. Now, however, we need to store the energy (electricity) *after* it has been generated by the wind and sun. This had not been properly anticipated hence, rather belatedly, energy storage has become an issue. And, as we all know, storing energy is not especially easy or risk-free. Currently, the only viable solution in the short/medium term is to exploit lithium-ion batteries to store energy on an unprecedented scale. The deployment of large-scale lithium-ion BESS has begun at pace – but with no adequate standards or adequate safety regulations being applied. A summary of BESS in the UK was recently published by the Faraday Institute [1].

What is in a lithium-ion BESS (LiB)?

A LiB site is a collection of containers that look like shipping containers. Each of these contain hundreds of individual lithium-ion battery cells packed into modules and the modules are packed into racks within the outer cabinet. There is usually provision in the container for liquid cooling of the batteries and a battery management system (BMS) that can monitor the state of charge (SOC) of the battery cells, their temperature and any gas release. Built-in fire suppression systems may also feature, although there are no regulatory standards for these. There are also power conditioning units to convert the incoming alternating current to direct current and to take the outgoing direct current and convert it to alternating current (invertors). These are often sited outside in separate containers. A typical example is the 20 foot (ca. 6m) CATL BESS container: https://www.evlithium.com/energy-storage-system-solutions/catl-enerc-plus-306-bess-container.html

The current LiB situation:

- Battery storage is critical for renewable energy to store the electricity that intermittent solar/wind produce and to trade electricity using the excess capacity the BESS have. Trading electricity (*i.e.* buying cheap electricity and storing it at times of peak output, ready for selling back to the National Grid at a higher price at times of peak demand) makes large-scale renewable schemes with BESS a particularly attractive proposition for investors.
- A typical modern BESS container will store around 4-5MWh of energy for a relatively short period of time. The batteries are usually charged and then discharged over a 2-4 hr cycle. The whole BESS installation should be specified by two numbers to designate the maximum *power* (in MW) that can be supplied and the total *energy stored* (in MWh). So, for example, a 200MW/400MWh system can deliver up to 200MW power for 2 hours.
- Most BESS today use lithium-ion batteries. The main chemistries in use today are: NMC, Nickel Manganese Cobalt and Lithium Iron Phosphate, LFP.
- Over 70% of all BESS units and components are made in China. The remainder come from the US (e.g. Tesla) and South Korea and Japan. There is no European manufacturer of significance.
- Currently the expected lifetime of the lithium-ion battery cells in these modules is between 8-13 years. So, for a 40-year LiB site there will have to be several (expensive) battery replacements during its operational lifetime.
- At present there are very few recycling centres anywhere in the world for the recovery of the materials used in LiBs and none of the present generation of lithium-ion batteries were designed to make recycling easier. It is hoped that this situation will change but estimates on current processes are that it is 2-3 times more costly to recover the metals for re-use as opposed to using new raw materials. Mining for lithium ore and

extraction of the metal from this also have major environmental consequences. China is the main source of processed lithium; substantial lithium deposits are also found in Latin America and Australia.

What are the concerns about LiBs?

Lithium-ion batteries have many attributes for rapid charging and discharging - clearly a vital part of the transformation to electric vehicles, as well as for our mobile phones, laptops, etc. However, they are not considered ideal for long-term energy storage and even for short term application their inherent instability is a cause for concern. There have been many well-publicised explosions, fires and toxic emissions resulting from this instability [2-6]. Whilst many of these have been in cheap and relatively badly controlled situations (such as in e-scooters and e-bikes), there have also been a number of LiB fires and explosions, some of which have resulted in deaths and life-changing injuries to first responders who were called out to handle the incident, as well as wider environmental contamination.

The main cause of these appears to be 'thermal runaway' which can result from metallic lithium dendrite formation in the lithium-ion battery cell – a problem that has not yet been fully solved. These dendrites or 'whiskers' of metal create an internal short circuit or 'hot spot' in the cell, which causes heating, vaporisation and ignition of the organic electrolyte, which in turn ruptures the cell via a vapour cloud explosion. The usual result is a self-propagating fire, fed initially by the organic electrolyte but subsequently the lithium metal itself can ignite and is almost impossible to extinguish. Such fires and explosions cannot be handled like a 'normal' fire – they cannot be extinguished by smothering, for example, as they do not require oxygen to sustain them. As such these incidents often last for extended periods of time (days and weeks) and re-ignition is not uncommon. During a thermal runaway incident many toxic and harmful gaseous and particulate emissions are released, usually requiring evacuation of surrounding areas. Further environmental hazards result not only from these toxic emissions to air and ground, but also from the millions of litres of water cooling which is applied to the affected area to help prevent the fire spreading. This results in toxic compounds in the firewater run-off. Fluorinated compounds in the fumes and the firewater are toxic - even in small amounts - and have a long lifetime in the environment, which could last for decades.

Even the slightly newer, lithium ferro-phosphate (LFP) batteries, which some developers consider slightly safer as they require higher temperatures before thermal runaway occurs, can and do experience thermal runaway. They also carry a higher explosion risk and higher concentrations of fluorinated compound emissions.

To summarise:

- **Lithium-ion batteries have exceptional ability to charge/discharge quickly but are inherently unstable.**
- **There have been many well publicised LiB failures, some of which have led to deaths and serious (life changing) injuries to first responders called to handle the incident.**
- **Failure is usually by thermal runaway. This can lead to explosion, fire and the release of highly toxic emissions to air and ground, with a risk of wider environmental contamination to water, soil etc.**
- **Fires are intense and self-propagating; they cannot be managed like a 'regular' fire. Most advice by Fire Services is simply to allow them to burn out (several days, sometimes weeks) and to keep surroundings cool using millions of litres of water ('drenching' takes place of surrounding buildings and areas). Re-ignition is not uncommon.**
- **Firewater run-off is toxic and needs to be contained and properly disposed. If this contaminated firewater was to get into aquifers, farming irrigation, crops or local streams or rivers it could have detrimental environmental impacts for decades.**

Lack of adequate legislation for lithium-ion BESS

The rapid deployment of LiBs in the UK has *not* been accompanied by the application of any adequate safety standards or regulation. This is astonishing given the publicity surrounding the Grenfell Tower fire which, tragically,

could have been avoided had the known risks been properly acted on. The roll-out of LiBs appears to come under the remit of Ofgem who class these as "energy generators" – yet they are not generators at all but, critically, rather "energy stores." One might expect that the Health and Safety Executive would have a say in the regulation of LiBs like they do, for example, in the case of hydrogen for energy applications and other gas storage operations. However, this does not seem to be the case. The Government recognises the risks with LiBs and indeed acknowledges the lack of adequate regulations to govern these [7]. However, the Government currently appears to be relying on the Fire Service to recommend guidance [8] which does not seem logical because the preventative safety aspects and planning considerations for BESS do not necessarily fall within their remit. Government regulation aimed at preventing thermal runaway in LiBs is urgently needed, as is clear Government instruction for planning authorities.

To summarise:

- **There is no clear legislation for LiBs in the UK**
- **There are no British Standards or other adequate government regulations being applied to ensure the safe manufacture, installation, operation and decommissioning of LiBs.**
- **There is no legislation preventing the use of second-life lithium-ion batteries being re-used in LiBs. Second-life lithium-ion batteries are considered to pose a much greater safety risk, since less would be known about their previous use, which could include previous damage/abuse that can make them more prone to failure.**
- **It has been suggested that LiBs should come under the Control of Major Accident Hazards (COMAH) legislation to ensure they are suitably regulated. This would appear sensible.**
- **Hazardous Substances Consents (HSC) are most likely required for the transportation of LiB units. HSC are almost certainly required for large scale LiB installations [9,10].**
- **Battery Management Systems vary – there are no statutory requirements or engineering specifications, so not all current safety features are present in all sites.**
- **There are no Government regulations on appropriate locations for LiBs, depriving planning decision makers of instructions on appropriate safety distances from occupied buildings, sensitive receptors and environmentally sensitive sites. Nor are there regulations on how to deal with LiB fires and explosions. The National Fire Chiefs Council have issued their own guidance notes for Fire and Rescue Services on dealing with LiB failures, but these are not legal requirements, nor are they specifically aimed at *prevention* of failures to avoid a major accident [11].**
- **Given the known risks, and potentially disastrous consequences of LiB failures, it is essential that the Government applies appropriate safety regulations to LiBs as a matter of urgency. Until they do this, such installations are being installed without adequate safety measures in place and in unsuitable locations.**
- **Some cities and regions in other countries have issued a moratorium on LiBs until adequate safety regulations are in place. This must surely be the most sensible approach in the immediate term.**

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2. EPRI BESS Failure Event Database https://storagewiki.epri.com/index.php/BESS_Failure_Incident_Database
3. EPRI White Paper distributed in May 2024 provides an Analysis of Failure Root Causes: https://www.epri.com/research/products/000000003002030360
4. https://www.britsafe.org/safety-management/2024/lithium-ion-batteries-a-growing-fire-risk
5. https://www.gov.uk/government/publications/grid-scale-electrical-energy-storage-systems-health-and-safety
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7. Ranki F, Walker A, Rowe G, "Battery Energy Storage Systems" UK House of Commons Library (April 2024) available at https://researchbriefings.files.parliament.uk/documents/CBP-7621/CBP-7621.pdf. Section 4, pg 25, highlights the lack of regulation
8. In the US, the NFPA has some guidance: National Fire Protection Association (2023) Standard for the installation of stationary energy storage systems https://www.nfpa.org/codes-and-standards/8/5/5/nfpa-855
9. https://unece.org/transport/dangerous-goods/un-model-regulations-rev-23
10. https://www.researchgate.net/publication/359203817_Hazardous_Substances_potentially_generated_in_loss_of_control_accidents_in_Li-ion_Battery_Energy_Storage_Systems_BESS_storage_capacities_implying_Hazardous_Substances_Consent_obligations
11. National Fire Chief Council guidance to first responders: https://nfcc.org.uk/wp-content/uploads/2023/10/Grid-Scale-Battery-Energy-Storage-System-planning-Guidance-for-FRS.pdf

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Professor Sir David Melville CBE FInstP (Professor of Physics, former Vice-Chancellor, University of Kent)

Appendix 2

Slides presented at Westminster outlining current absence of regulation and lack of accountability regarding LiBESS safety matters

SAFETY CONCERNS & LACK OF REGULATION: LITHIUM-ION BATTERY STORAGE

Smoke and flames are seen from Castroville as a fire at the Vistra battery storage plant burns in Moss Landing, Calif., on Thursday, Jan. 16, 2025. (Doug Duran/Bay Area News Group)

Westminster Roundtable

10th March 2025

Dr Catherine Judkins

Chair, Say No to Sunnica Community Group

Vice Chair, UK Solar Alliance

www.uksolaralliance.org

Say YES to the environment

#SayNOtoSunnica

UK solar alliance

OVERVIEW: LI-BESS

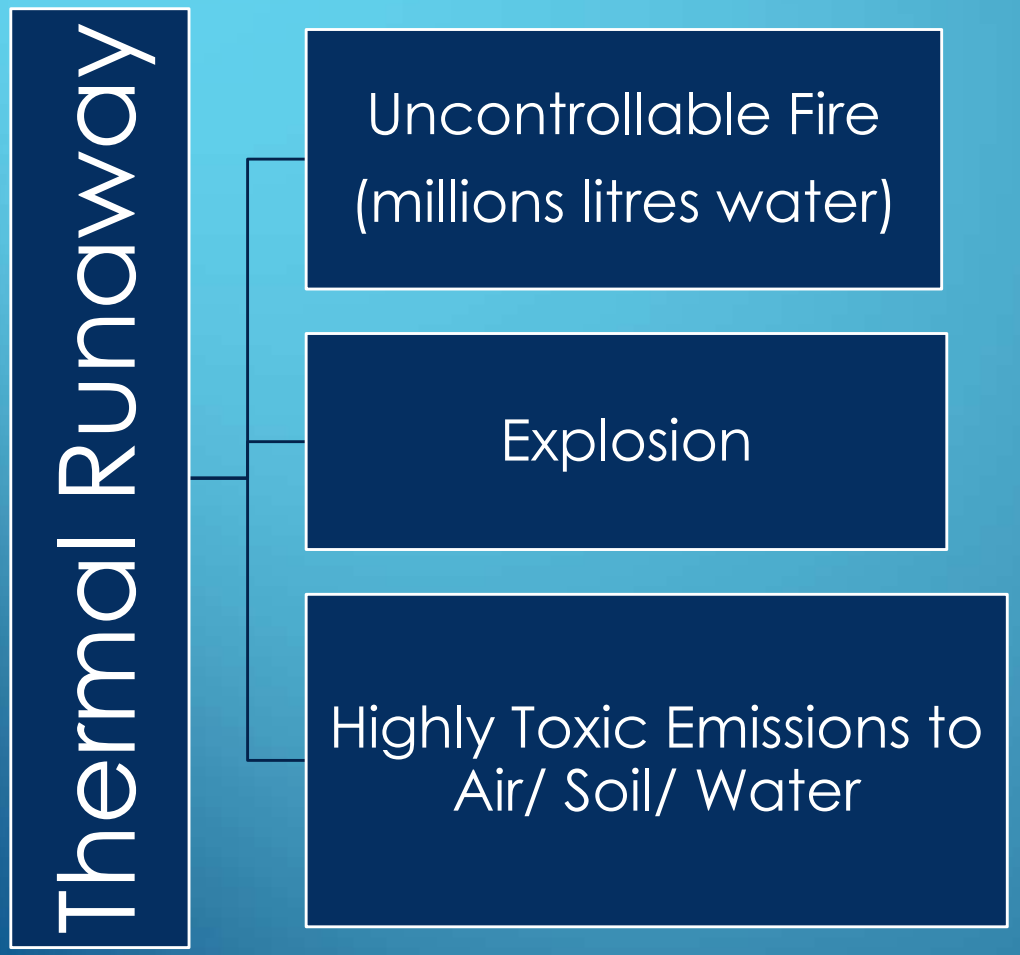
- Battery Energy Storage Systems (BESS) have become more prevalent as more solar/ wind energy is deployed. Often co-located with solar and wind farms
- Role is to help smooth fluctuations in Grid by storing energy for short periods of time to be released later in the day when demand is higher. BESS operators trade electricity
- Vast majority of BESS today (and for immediate future) use lithium-ion batteries (Li-BESS) – rapid charge/ discharge, lower cost
- Many thousands of individual lithium-ion battery cells packed into racks and into containers

BUT…..Li-BESS come with known risks due to instability of lithium-ion battery cells.

Thermal Runaway – where a single cell fails and triggers cascade reaction

BESS example - Blackhillock, Scotland. Currently 200MW; soon to be 300 MW/600MWh. Source: www.zenobe.com

LI-BESS: THERMAL RUNAWAY



- Fires cannot be readily extinguished
- "Let it burn" (avoid explosion impact)
- Cool surrounding area to minimise spread
- Millions litres water required
- Firewater becomes contaminated (with toxic emissions and suppressants)
- Firewater must be contained – or risk to waterways and soils
- Highly toxic plumes (e.g. HF, HCN, carcinogenic particulates, heavy metals) spread over wide area
- Mass evacuations and Shelter in Place orders. Prolonged evacuation periods exacerbated by re-ignition
- Toxic ash deposits, particulates, etc. contaminate ground, water over wide area. Can last for years.

EXAMPLES OF RECENT LI-BESS FAILURES

Moss Landing, USA. Jan 2025

- 4th incident in 5 year period
- State of the art facility with "accredited" safety systems
- Evacuation area approx. 6Km (ca 1500 residents; some have still not returned)
- Shelter in Place beyond evacuation zone
- Reignited ca. 5 weeks later
- Initial reports on health impacts, breathing difficulties, etc
- Initial data released on potential contamination of soil, crops.

Escondido, USA. Sept 2024

- Single container affected.
- Incident took ca, 4 days to control
- Mandatory evacuations *"immediate threat to life"* notification
- Residents, ca. 500 businesses and at least 3 schools evacuated
- Evacuation/ Shelter in Place over 2 Km away
- Remained closed for days

Otay Mesa, USA. May 2024

- Mandatory evacuation approx. 24 hrs. Lifted, then reinstated due to re-ignition
- Took ca. 2 weeks to bring under control
- Evacuation/ Shelter in Place over 2 Km away
- Evacuation orders lifted 13 days after incident began
- Reports that ca. 8 million US gallons water needed
- Concern about volume of toxic firewater runoff and pollution

PROBABILITY AND LACK OF ADEQUATE REGULATION

- According to DNV, world leading manufacturer of lithium-ion batteries, there is an expectation that "at least 1 failure" in a Li-BESS will occur over the project lifetime. "Expecting a failure to never occur unrealistic"
- Their objective is to research ways to help them "fail safely"
- Batteries in Li-BESS only have shelf life of ca. 5-13 years. For a 40+ year Li-BESS project they will be fully replaced several times over. For large scale Li-BESS this means millions of individual Li-ion cells. Only 1 needs to fail to trigger thermal runaway: Probability is high
- No adequate safety regulations currently for Li-BESS
- Senior official in Moss Landing accurately sums up the current situation across the globe:

  "it is obvious that this technology is ahead of both government's ability to regulate it and private industry's ability to control it." (Supervisor Glenn Church, Moss Landing)
- Current situation described by combined authority as "Toxic Mix" of known major safety risk, lack of adequate regulation, rapid deployment
- No regulation to assist planning decision makers or FRS (Fire and Rescue Services) to properly assess appropriateness of locations, safety measures, etc
- Experts calling for pause on Li-BESS deployment until adequate safety regulation are enforced (some US cities have already imposed moratorium on Li-BESS)
- We believe Li-BESS above certain size thresholds already lie within the scope of COMAH and Hazardous Substances Consent (HSC), but the regulations are not currently enforced

RESPONSIBILITY??

HSE – only responsible for workplace health and safety. Do not comment on safety plans (BFSMP)

DESNZ – lead on Net Zero and BESS policy

FRS – responsible for safety of their first responders

OPSS – office for product safety and standards. Limited scope

MHCLG – deal with planning policy

?

But who is responsible for wider public safety?

And the wider, long-lasting environmental contamination (of water/ soil/ crops?

THANK YOU!

Dr Catherine Judkins

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Application for free use of Mandeville Hall on Fridays -1:30 – 3:30pm for Burwell Foodbank on an ongoing basis.

This previously was held at the Day Centre (for free) however the space the are able to offer isn't large enough.

This would be operated by:

- Ely Foodbank is a registered charity that started in Ely but now has expanded to work across East Cambridge and the Fens. The charity which would be more appropriately called East Cambs and Fens Foodbank now has 9 foodbanks every weeks in 8 different towns and villages in the area; Burwell Waterbeach, Soham, Ely, March, Cottenham, Haddenham and Chatteris. Food donations are collected in all these areas from shops, Churches, schools and businesses and are then taken to our warehouse and sorted and packed into food parcels for single people, couples and families and redistributed to the local foodbank sessions each week.
- The Burwell foodbank helped nearly 400 people last year 40% of these were children.
- This amounted to over 6,000kg of food and household supplies being given with a value of over £15,000
- The charity operates a referral partner network including Burwell Surgery, Burwell Community Pantry, Citizen's Advice, East Cambs Council, St Mary's Church Burwell and many more. These referral partners are the front-line services that see Burwell people who need help and they then refer them to the Burwell Foodbank.
- The foodbank is held each Friday (currently at the Day Centre) but our aim is to hold it in a local hall so we can offer tea and coffee to clients, have a chat with them and see if there are other services that may be able to help them with the cris they are facing.
- The charity has a partnership with Citizens Advice where clients can speak to an adviser and get help with various issues that may be forcing them to have to use Burwell Foodbank. These could be issues around; housing, benefits, disability, budgeting, mental health and addictions or domestic abuse or indeed abuse of any kind.

Cambridgeshire County Council
Aurora Asset Management System Implementation Newsletter – July 2025

Dear Reader,

This is the first in a short series of updates about a major change we are making to the way we manage highways behind the scenes.

Later this year, we will be switching to a new highways asset management system called **Aurora**.

You probably have not heard of an asset management system before, but it is the tool that keeps everything moving under the surface. It is where we log reports, track inspections and prioritise works. It underpins everything from gully emptying to pothole repairs and indeed is how we turn a pothole report into a pothole repair.

Our current system is nearly 20 years old. It is clunky, unreliable, and makes even basic tasks harder than they should be. If you have ever had a pothole report closed too early, or waited months with no update, you have seen the problems first-hand. The new system should mean fewer of those headaches — for you and for our officers.

Aurora will give us better tools to plan, prioritise, and report on highways issues. It will allow us to track defects more accurately from report to fix and help us make smarter decisions with the funding we have got. In short: it is a big step forward.

We will be running a virtual demonstration in late August or early September so you can see how it works and ask questions. Details coming soon.

Thanks for your ongoing support as we work to improve our highways.

Cllr Alex Beckett, Chair
Cllr Robin Wyatt, Vice-chair
Highways & Transport Committee.

What is Aurora?

We are currently upgrading our asset management system from Insight to Aurora.

We use our asset management system to track, maintain, and optimise the performance of physical assets such as roads, structures, and public rights of way throughout their lifecycle and for collating and responding to customer reports submitted via Report It.

It helps us to plan maintenance, reduce costs, improve service delivery, and make data-driven decisions to extend asset life and ensure safety, compliance, and efficiency.

Aurora represents a significant upgrade that will modernise the way we deliver our highways services across the county and update customers regarding reported defects.

What will Aurora be used for?

Aurora offers structured, best practice processes for the management of asset data (e.g., highways, bridges, drainage) aligned with industry standards.

This will enable us to respond to customer enquiries efficiently and accurately, plan inspections, schedule routine or reactive maintenance, and track defect resolution within asset lifecycles.

Going forward, the Aurora system will handle customer reports submitted via Report It.

What will be the changes from the current system?

Aurora is a map-based system that enables mobile working via tablets and phones powered by Geographical Information System technologies, Google Street View, and spatial dashboards for real-time situational awareness.

This will enable our Officers to complete inspections, raise works orders, respond to enquiries, and update asset information on-site.

What will be the benefits and improvements?

- **Enhanced public engagement**: automated updates along with the ability for Officers to send real-time updates whilst mobile working will significantly enhance the customer experience providing multiple touchpoints as a reported defect moves from initial customer reported stage, through inspection to delivery.
- **Report management**: the way customer reports are logged, triaged, and managed is much more efficient and effective. This enables us to quickly identify overdue responses or reports which should have been actioned and then have not to focus on and address.
- **Increased efficiency**: through automation of inspections and reactive and planned maintenance workflows Aurora will reduce manual effort, speeding up processes. This will allow officers more time to focus on other areas.
- **Improved compliance and risk management**: dashboards alert for upcoming inspections, overdue customer reports, conflicting works, defect management, and detailed audit trails support legal compliance. This will allow us to track performance against agreed indicators and ensure we are working within agreed timeframes.
- **Improved decision-making**: real-time data builds dashboards and mapping views for smarter planning and performance insight. This will allow us to make more informed decisions around investment, ensuring best value for money.

Progress to Date and Looking Ahead

Progress to date

- **Stakeholder engagement**: a series of workshops were conducted with key stakeholders to identify and capture system requirements from teams responsible for delivering highways services.

- **System configuration**: the system has been aligned with our new Highways Maintenance and Management structure. This allows for the automatic allocation of customer reports, improving response times and accountability.
- **Integration with service providers**: development is underway to ensure seamless integration between Aurora and the system used by M Group. This will enable the efficient exchange of work order placement and progress.
- **Proof of concept demonstrations**: demonstrations are currently being delivered to showcase the system's capabilities. These sessions also provide an opportunity to gather feedback and make final adjustments before full deployment.
- **Mobile device rollout**: new tablets have been procured and are being distributed to Highways Officers and Inspectors. These devices will allow staff to record defects and initiate work orders while on-site, streamlining field operations.

Looking Ahead

- **User Acceptance Testing:** we are about to begin end-to-end testing of the system to ensure it is fit for purpose and that workflows, spatial areas, and bespoke processes have been correctly configured.
- **Training:** we will be delivering comprehensive training to all teams transitioning to the Aurora system to ensure colleagues are prepared and confident to use it from day one.
- **Go-Live Planning:** to ensure a smooth and coordinated transition, we are working closely with all stakeholders and suppliers to clearly define roles, responsibilities, and support arrangements for the go-live weekend.
- **Communication and engagement:** we will send regular updates to keep everyone involved in the project informed of progress and key milestones, while also providing opportunities for feedback.

How you can get involved

We will be hosting a virtual demonstration in late August or early September to showcase the Aurora system and the benefits it will bring to how we manage our Highways & Transport services. An invite will be circulated to all parishes and members across Cambridgeshire shortly.

This session will be recorded and shared with both Members and Parish Councils. This will provide an opportunity for you to provide thoughts and feedback.

We would also welcome volunteers for a parish council working group to work with officers to provide us with user feedback to help identify any further changes which may need to be considered post go-live.

Please do contact us if you have any questions or thoughts related to this important improvement to how we work: local.highways@cambridgeshire.gov.uk

From: Local Nature Recovery Strategy
Subject: Cambridgeshire & Peterborough Local Nature Recovery Strategy - Consultation now live
Date: 28 July 2025 18:10:29
Attachments: image001.png

Dear Parish Councils,

We hope you have already seen that the public consultation on the draft Cambridgeshire and Peterborough Local Nature Recovery Strategy (LNRS) is now live and will run until Thursday 11 September 2025.

The LNRS is a key part of the Environment Act 2021 and aims to set out priorities and opportunities for nature recovery across our region. As one of the most nature-depleted areas in England, this strategy is vital to help us deliver on our shared ambition of Doubling Nature and creating a thriving natural environment for people and wildlife.

We warmly invite you to:

- Review the draft strategy and supporting documents
- Explore the interactive habitat map portal and story maps
- Share your views through the online survey

You can access all materials and the consultation survey here:
Visit the LNRS Public Consultation Website

We encourage you to share this opportunity with your local community and stakeholders. Your input is essential in shaping a strategy that reflects local priorities and supports meaningful action for nature recovery.

Thank you for your support.

LNRS Production Team
Cambridgeshire & Peterborough LNRS
Email: localnaturerecoverystrategy@cambridgeshire.gov.uk
New Shire Hall, Emery Crescent, Enterprise Campus, Alconbury Weald, PE28 4YE

Local Nature Recovery Strategy for Cambridgeshire and Peterborough Public Consultation Now Open!

Have your say by 11 September 2025

Click here to view the consultation page

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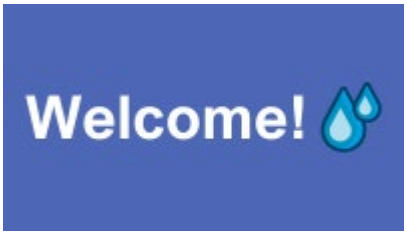
Flood and water newsletter

July 2025

Cambridgeshire County Council

Contents

Welcome to the sixth flood and water newsletter



Welcome to our sixth Cambridgeshire Flood and Water Newsletter. The council oversees local flood risk, including the management of groundwater and surface water flood risks and the regulation of ordinary watercourses. We work in partnership with the Environment Agency, district and parish councils, water companies and Internal Drainage Boards.

Managing flood risk and increasing community resilience in Cambridgeshire is our priority and we work closely with local residents to achieve this.

This seasonal newsletter provides you with information, advice and guidance relating to flooding, and explores how to manage watercourses depending on time of the year. We also promote upcoming events and provide information on local flood groups. Where relevant, we share local case studies so that you can see some of our achievements.

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Regional Flood and Coastal Committee vacancy

The Anglian (Great Ouse) Regional Flood and Coastal Committee (RFCC) is seeking to appoint a new independent member.

They are particularly keen to hear from members of community flood groups across the Great Ouse catchment who are passionate about representing the wider interests of communities.

If you are involved in a local flood group and would like to contribute to regional discussions on flood risk and resilience, this could be a great opportunity for you.

The closing date to apply is 22 August 2025.

Apply by completing this online form

Read more about RFCCs on the gov.uk website

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Exciting news: Riparian Maintenance Grant Fund returns

We're pleased to share that our Riparian Maintenance Grant Fund is making a return! This fund will soon be open to community flood groups and Parish Councils to support one-off maintenance projects on local watercourses, helping to tackle flooding concerns.

The application process and award criteria are currently being finalised, and we'll share full details as soon as they're ready.

In the meantime, we encourage you to start thinking about any local areas that might benefit from this funding – it's a great opportunity to make a real difference in your community.

Stay tuned for more updates.

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After the flood, the drought: preparing for both extremes

While flooding often dominates the headlines, recent news of drought being officially declared in parts of the UK is a stark reminder of challenges at both extremes of weather. Cambridgeshire is known as a 'water scarce' county because we receive

less rainfall than many other areas. As a community it is important to understand how drought and flood risk are linked, and why preparing for both is essential.

Periods of prolonged dry weather can harden the ground, reducing its ability to absorb water. When heavy rain does eventually arrive, particularly in the form of summer thunderstorms, water can runoff quickly, increasing the risk of surface water flooding.

Drought also reduces the effectiveness of natural flood mitigation measures. Vegetation that usually 'slows the flow' can become stressed or die back. In rural areas, dry soils can lead to increased sediment runoff, further impacting drainage and water quality.

These swings between drought and flooding are becoming more common due to climate change so it's important to plan for both. Whether that’s by maintaining drainage systems, watercourses or greenspaces, local actions can make a big difference. Simple steps like clearing drains and gutters, installing water butts, and using water more efficiently can all help.

By understanding and preparing for both extremes, we can make our community more resilient - whatever the weather.

Alconbury Weald – Paul England Photography

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Flood Group Chairs meeting

Following the second meeting of Cambridgeshire Flood Group Chairs on 2 June 2025, the County Council has launched a survey about how we can best support flood groups in terms of capacity building, training, and literature. We have had responses from eight flood groups so far but are still hoping for more so if you have chance, please complete our Cambridgeshire Flood Groups survey.

Responses to date have mainly been from groups in South Cambridgeshire and Huntingdonshire but we are looking for a good spread from across the county so if you live within East Cambridgeshire, Fenland or Cambridge City please do get in touch.

Key findings from the responses we've received so far include:

- Two of the biggest challenges most groups face is low community engagement and participation and insufficient training/expertise.
- The biggest area of support requested by groups is training and capacity building, closely followed by technical expertise and advice.
- Most groups would prefer in-person workshops and training sessions, but many would like to see online webinars/ virtual meetings or one-to-one consultation with experts.

We will use the findings of the survey to help tailor our support to flood groups.

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Community flood kits

We're working in partnership with the Environment Agency to help communities across the Great Ouse catchment become better prepared for flooding.

If your community is at risk from fluvial or surface water flooding, has an active flood group, and a flood plan, you may be eligible to receive free equipment to support your flood response efforts.

These flood kits are intended to help local volunteers take early action during a flood. Items typically include:

- High visibility jackets
- Dirty water submersible pump
- 'Road flooded' road signs

- HydroSacks and HydroSnakes
- First aid kit
- Two-way radios
- Wet and dry vacuum cleaner.

If your group meets the criteria mentioned above, please get in touch: flood.andwater@cambridgeshire.gov.uk

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Ordinary watercourse consents in Cambridgeshire

If you are planning on undertaking any works to an ordinary watercourse, you may require consent under the Land Drainage Act (1991) from the regulating body. This is usually Cambridgeshire County Council, but for an ordinary watercourse in the ratable area of the Internal Drainage Board (IDB) you will require consent from the IDB instead. Please refer to the Internal Drainage Boards map on the Association of Drainage Authorities (ADA) website.

An 'Ordinary Watercourse' is any river stream, brook, ditch or drain, through which water may flow which is not designated as main river. It does not have to be recorded on a map to be an ordinary watercourse and does not need always to contain water.

Why consent is needed

Regulation is required to minimise the risk of flooding and ensure that there is no increased flood risk in a particular location, avoiding adverse effects on people and the environment. The process consists of issuing consents for acceptable work and undertaking enforcement action when appropriate, to deal with unacceptable activities.

Work that is carried out without consent has the potential to increase flood risk to people and property and can result in civil action being taken. Please note that works cannot be retrospectively consented.

What does the legislation state?

Section 23 of the Land Drainage Act (1991) states, no person shall:

- Erect any mill dam, weir or other like obstruction to the flow of any ordinary watercourse or raise or otherwise alter any such obstruction, or
- Erect a culvert in an ordinary watercourse, or
- Alter a culvert in a manner that would be likely to affect the flow of an ordinary watercourse, without the consent in writing of the drainage board concerned.

Type of works that require consent

Consent is required for temporary or permanent works which are likely to:

- Alter or impact the flow or storage of water
- Involve installation of a new pipe (culvert), bridge, dam, weir, pond or other structure in the watercourse
- Constitute a change to the alignment or the banks of the watercourse.

When considering if your works require consent, check whether they would affect the flow of the watercourse when it is full to the top of the bank. If the flow of the watercourse when full to the top of the bank will be affected, the work will likely need consent. If you are in any doubt about whether you require consent, please email us at: flood.andwater@cambridgeshire.gov.uk

Remember, even if you have planning permission or other consents, you may still require consent if you intend to carry out works on an ordinary watercourse.

How to apply for consent from the council

For consent to be granted, you must submit your application for consent at least two months before you intend to carry out any works, allowing us to fully consider your application. Please note there is a fee for consent applications; this is currently set at £50 per structure.

Find out more about how to apply on the council website

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Did you know?

Land values and house prices located adjacent to Sustainable Drainage Systems (SuDS) features may attract a 10% premium on resale.

Read Construction Industry Research and Information Association (CIRIA)'s overview of SuDS performance.

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Myth buster – health and safety

Myth - It is a common misconception that SuDS components, like ponds, are a safety hazard and must be fenced off.

Reality - While safety is important, fences are not always the best solution. Careful design with features

like shallow slopes and gradual edges and benching can make ponds safer and more integrated with the landscape.

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Keeping in touch

Visit our Cambridgeshire flood and water webpage

Report a flood using the form on our website

Email us:

- Planning, pre-application or development related enquiries
- Watercourse consenting, enforcement, and general enquiries
- Community Flood Action Plan

Write to us:

Flood and Water, New Shire Hall, Emery Crescent, Alconbury Weald, Huntingdon, PE28 4YE

Phone us:

0345 045 5200 (General Enquiries)

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From: [redacted]
To: Katherine Hyett
Subject: Speeding deterrent - Newmarket Road
Date: 14 July 2025 15:17:12

Hi Yvonne,

I hope my email finds you well?

I was pleased to hear that the 20mph limit was scrapped in Burwell, as someone living off Newmarket Road I see first hand how people don't follow the current 30mph limit so reducing it I don't believe would help.

There is however still a large issue particularly down Newmarket Road with speeding. I believe some cars are even doing 50mph as it's a straight drag for them.

Would the council consider as part of the works carried out on the housing development to fund speed bumps being installed along Newmarket Road to prevent speeding please?

I look forward to hearing from you soon.

All the best
[redacted]
St Mary's View

From: [redacted]

Subject: Grid Scale Battery Storage Systems in Burwell
Date: 20 July 2025 11:07:49

Dear Ms. Cane,

Since we haven't communicated before, let me start by congratulating you on winning the parliamentary seat last year.

I am writing today regarding the profusion of grid scale Battery Energy Storage Systems in Burwell, namely:

- The 50MWh BESS near the electricity substation in Weirs Drove.
- The 30MWh BESS under construction adjacent to the above system.
- The 50MWh BESS approved for construction at Anchor Lane Farm, Newnham Drove.

(hereafter described as first site, second site… respectively).

Since the first of these systems became operational, some of my neighbours, Burwell Parish Council and I have raised numerous issues with East Cambs Council. Some of these have been environmental concerns (noise, visual screening, etc), and some fundamental safety issues. Itemized below are some of the ones I have raised personally.

1. A top Oxford University physicist, and other energy experts, regard these installations as being fundamentally unsafe to site near residential areas. I have previously referred East Cambs. Councillors to https://www.researchgate.net/publication/352158070_Safety_of_Grid_Scale_Lithium-ion_Battery_Energy_Storage_Systems .

2. You will be familiar with the difficulty of extinguishing Li-ion thermal runaway events in electrical vehicles as small as a scooter. A high-end electrical car battery, such as in a Tesla model 3, stores about 75KWh, or 0.075 MWh. Consequently, the combined site at Weirs Drove will have the combustible equivalent of over one thousand Tesla EVs, or to put it another way, the energy equivalent of about 68 metric tons of TNT (not counting any chemical energy likely to be released in an incident). As an expert in waterways and environmental recovery you will know, far better than I, the effect of flushing thousands of gallons of contaminated water into Burwell Lode.

3. I have previously referred East Cambs. Council to https://ctif.org/news/accident-analysis-beijing-lithium-battery-explosion-which-killed-two-firefighters in which 235

firefighters with 47 fire trucks from 15 fire stations were apparently dispatched to deal with a BESS incident of a 25MWh facility in Beijing. While I have the highest admiration for the volunteer Burwell Fire Service, is it credible that they, or even the combined facilities of Cambridge and nearby towns, could be expected to deal with an incident at one of these sites in the timescale required?

4. When I asked the council planning department where the relevant requirements for liability insurance for these sites are documented in the applications, I was informed "**In answer to your query, the matter of liability insurance is not one that falls within the remit of the planning system.**" Consequently, we come to the issue of who would pay for loss of life, injury, loss of income, and damage to property should there be an incident. Even a contained incident might require evacuation of residents until the site was stabilized, and stranded energy recovered. In the absence of guaranteed liability insurance, who can residents (or indeed the council) count on to recover costs incurred? Does the planning process check that the companies behind these sites are substantial, and not isolated entities intended to fold with limited liability in the event of trouble? I ask because my own research suggests the companies behind at least some of the Burwell sites might be Special Purpose Vehicles, with all that implies.

5. The sites have minimal security, whether from vandalism, cable theft, or from deliberate sabotage, at time when there is heightened global tension. From the fact that, at the first site, audible alarms have rung all night without being addressed and cancelled it seems possible that neither security, safety, nor residents' sleep is a primary concern.

6. The sites rely very heavily on Chinese technology, both for normal operation, and for staying with safety limits. The head of NATO has pointed out that simultaneous concerted action by China and Russia is a very credible scenario. You will be aware that no Chinese company of the size of CATL (site 1 battery supplier) operates independently of the wishes of the Chinese government. A Web search in this area will provide more detailed information on the concerns, e.g. https://www.reuters.com/sustainability/climate-energy/ghost-machine-rogue-communication-devices-found-chinese-inverters-2025-05-14/

7. The existing 50MW site is far noisier than we were led to believe at the consultation. On a daily basis this is the single most intrusive feature of the installation. Residents have serious concerns that the measurements may not have been taken when the site was operating at full or even possibly normal operational capacity. Despite this, East Cambs. agreed that the required planning condition was discharged: 20/01645/DISC | To discharge Conditions 9 (Noise assessment), and 10 (Noise management) of decision dated 31/03/2021 for 20/01645/VAR Variation of condition 1 (Approved plans) of previously approved 17/02205/FUL for Development of a 49.9MW battery storage facility, bridge and associated infrastructure | Land North West Of Electricity Sub-Station Weirs Drove Burwell
Our neighbour, Mike Starnes of Hythe Close has been assiduous in itemizing flaws in the way noise nuisance has been assessed and disregarded in the planning process condition discharge.

8. As a condition of planning approval, the first site was required to provide landscaping for the lifetime of the development. East Cambs. have agreed this condition has been discharged, 20/01645/DISB | To discharge Condition 12 (Scheme for the maintenance of the soft landscaping for the lifetime of the development) of Decision 20/01645/VAR dated 31.03.2021 for Variation of condition 1 (Approved plans) of previously approved 17/02205/FUL for Development of a 49.9MW battery storage facility, bridge and associated infrastructure | Land North West Of Electricity Sub-Station Weirs Drove Burwell . In fact, the sapling trees initially planted around the bund died in the first dry

spell. When residents have complained, eventually new saplings have been planted, and then those too left (apparently unattended) to perish. As you can imagine, the sound and visual screening effectiveness of three-foot high dead saplings is somewhat limited.

For points 1 to 6, all I can really do is point them out, and make sure it is on record that East Cambs. Council has had them (often multiple times) brought to their attention via councillors, the relevant planning case officer. and the planning commenting system. At no point has anyone refuted the points I have made, or taken it upon themselves to say, “We approved this development as safe because…”. The only (very guarded) relevant response was a relayed comment that the Council’s Scientific Officer found the points raised “interesting”.

Although promoted with a Green agenda, it is very clear that there is something of a goldrush in the BESS storage area, with tax incentives, subsidies, and lucrative returns available to installers. Consequently, given the scale of those rewards, I hope you would agree that is not unreasonable to expect the installations to be sited at a safe distance from the village, properly maintained, properly staffed and secured, and environmentally sensitive as regards noise and other pollution.

Consequently, for points 7 and 8 I hope you will consider using your good offices to encourage East Cambs. Council to insist that the landscaping is completed and maintained properly for the original 50MW site, and that the mistakes of noise irritation to residents are not repeated at the second and third sites. Also, I’m sure Burwell residents would appreciate it, from both a sleep and safety reassurance point of view, if alarms were monitored and responded to effectively.

Incidentally, lest I be labelled a Luddite, my own background is physics and engineering, including the energy sector, I currently work in AI, and I am all for technology when used in the appropriate place, and with all due diligence.

This has been a long email, and I thank you for your time, and in advance for any help you can offer. I have courtesy copied Burwell Parish Council as they have been active in promoting residents’ welfare in this area. Also (with his permission), our neighbour, Mike Starnes of Hythe Close, who is mentioned in section 7. Mike has been very active in this context, including (but not limited to) noise irritation, visual screening, and the way additional battery capacity has been added to site 1, beyond what was initially proposed. I believe he is also active in, and shares your ethusiasm for, the welfare and protection of waterways.

With All Best Wishes