

# Preparing for Plug-in solar



Understanding upcoming regulation,  
opportunities, and sector considerations

# WHO ARE WE?



David Wilton  
Chief Exec



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# WHO ARE TPAS CYMRU?



## Tenant Experts since 1988

Work with all  
Social Housing  
Landlords in Wales  
to shape housing  
services

Share and  
promote good  
practice in tenant  
participation

Collaborate with  
partners across the  
UK  
(Scotland, England,  
Northern Ireland)



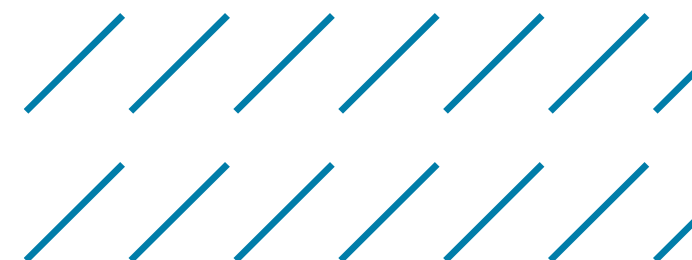
# What we want to focus on

**Benefits**

**Reasons: For & Against**

**Intial Issues & Questions**

**Welsh Govt**





**Session will NOT be recorded**

**Ni fydd y sesiwn yn cael eu recordio**



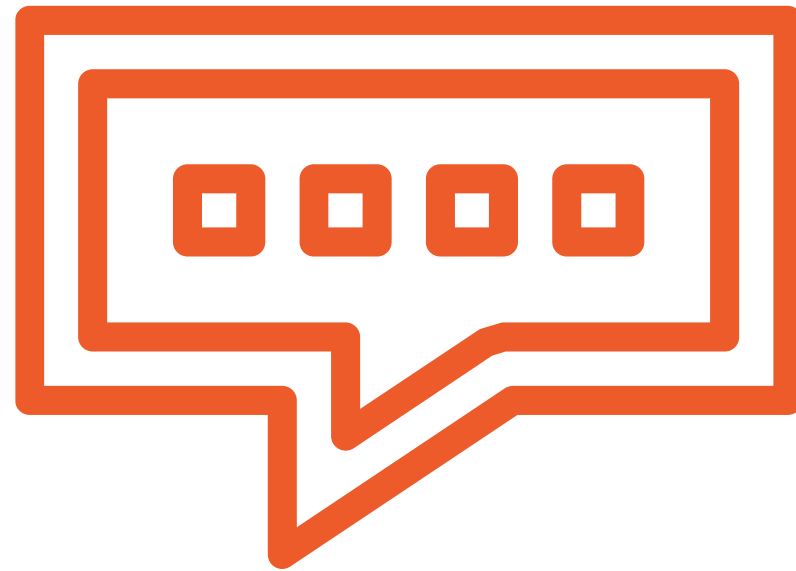
**Please complete feedback form**

**Llenwch allan ffurflen adborth**



**Slides will be emailed out after the session**

**Bydd sleidiau yn cael eu danfon allan**



**Closed caption feature  
is available to use**

**Os oes angen, gallwch  
defnyddio CC**



**Chat function is available  
to use**

**Gallwch defnyddio'r chat  
os oes angen**

# Before we continue



# May not be an issue



Move along, nothing to see here.



**Please disperse.**

# People are acting



## PlugInSolarUK

The UK's community for plug-in solar panels. Independent advice, real-world results, and honest discussion about balcony and garden solar kits — now legal in the UK since March 2026. Whether you're a renter in a flat or a homeowner with a south-facing garden, this is the place to ask questions, share your setup, and learn from others.

Created Apr 28, 2026

Public

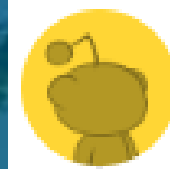
Community Guide

4.2K

Plug-In Warriors

127

Weekly contributions



**initiali5ed** • 9h ago

It's time people stopped asking for permission.



3



Reply



Award



Share



**Ok\_Way9206** • 4m ago

The more or less complete takeover by the nanny State. Why waste all that emotional energy, going against the vast mass of humanity, and think for yourself, when all the apparatus of the state thinks it is its job to do that for you?



1



Reply



Award



Share



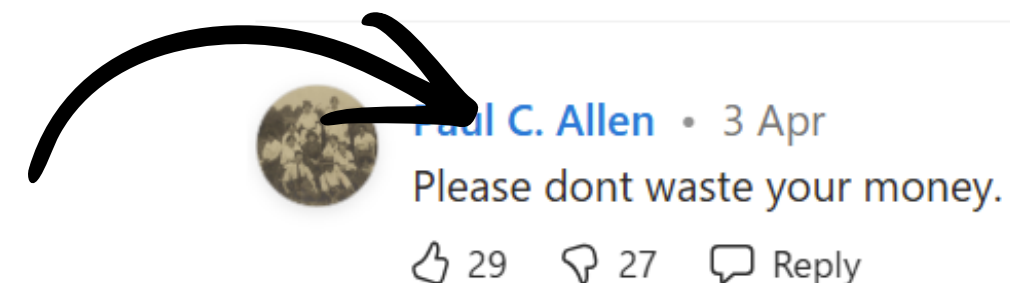
r/PlugInSolarUK • 3d ago  
LieSuccessful8813

## How do we ensure balcony-mounted panels cannot become a falling object?

Germany has over a million balcony solar systems, many mounted directly to railings. For those familiar with building safety or insurance, what would the UK consider an acceptable balcony mounting system? Would certified brackets and safety cables be enough, or would insurers and housing providers expect something more?

# Benefit for tenants

- Tenants will be **flooded with cheap offers** – we know Lidi, Amazon etc are already taking pre-release orders.
- Reddit **recommending good value packages** from City Plumbing, Eco Flow etc.
- YouTube is **awash** with DIY guides and reviews.
- Perceived **ease of use**: The message is 'plug the kit parts together, plug into nearest socket, off you go'
- Perceived **ease of entry**: kits being marketed at £400, low entry point to get some energy savings.
- Promise of **reduced bills**: Most media coverage and chat sites claim a 4 year ROI



Stan Smith • 17 Apr

@Paul C. Allen

How is free electricity a waste of money? I have has cheap panels on my shed for years, a small battery and inverter. No problems at all.



# Benefit for tenants

- Homes with no PV- could be waiting years for landlord to fit.
- Tenant has PV already, is confident and wants additional PV boost during cost of living crisis
- Might get bought for them by others : fuel poverty charity offering subsidies etc
- Plenty of examples of it being norm / standard abroad and working.
- There will be plenty of positive media coverage once ban is lifted. Media like The Sun , MSN etc all running VERY positive stories with big claims on ease and savings.

## Lidl to sell £400 plug-in solar panels – here's what to know

Plug-in solar panels could soon appear on UK shelves, but how much can they really save you?

# Savings?

Government estimates suggest some households could save around £70 to £110 a year on energy bills. But that figure should be treated as a guide, not a guarantee. Your actual savings will depend on several factors, including:

- How many panels you have
- How much sunlight they receive
- Whether they face south, east, west or north
- Whether they are shaded by trees, buildings or balcony walls
- How much electricity you use during the day
- Whether the system can export surplus electricity safely and whether you are paid for it

A sunny, south-facing balcony or patio is likely to perform much better than a shaded or north-facing space. Similarly, a household that uses electricity during the day may benefit more than one where most demand is in the evening after the sun has gone down.

If a kit costs around £400 to £500 and saves £70 to £110 a year, the payback period could be roughly four to seven years in favourable conditions. For some homes, it may take longer.

So just how do you plug them in? Do you have to leave a window partially open? Then unplug and close it when you go out? Do you bore a hole in the wall and do some rewiring? What if you have several?...

[See more](#)

👍 84    💬 20    🗨 Reply



**Matthew Uffindell** • 26 Mar

Plug them in to a outside socket and leave them to work their magic, 800watts is the maximum legal load for plug in solar, anymore than that you will compromise household circuit safety, but that's enough to easily power a fridge freezer, lights, a TV and maybe even a vacuum cleaner at the same time. Payback will be roughly 2-3 years. Payback on a usual roof top system is around 5-6 years but obviously generates much more power, with the surplus going to battery or grid.

[Show less](#)

# Benefit for landlords

- Helps reduce tenants' energy bills and those struggling with fuel poverty.
- Stopping tenants from using a system that helps them save money could be viewed negatively, especially if they have already purchased it.
- If installed correctly and used safely, there is no obvious reason not to allow it. Similar systems are already used successfully in many parts of the world.

October 2024

## Household type and vulnerability status

- Around 340,000 households (25%) in Wales were in fuel poverty, including 63,000 (5%) in severe fuel poverty and 215,000 (16%) at risk of fuel poverty.
- Around 304,000 vulnerable households (26%) were in fuel poverty, with 46,000 (4%) in severe fuel poverty and 198,000 (17%) at risk of fuel poverty.
- Around 195,000 lower income households (83%) were in fuel poverty, 56,000 (24%) in severe fuel poverty, and 28,000 (12%) at risk of fuel poverty.

**Germany has become a leader in plug-in solar. What's taking other European countries so long?**



# Possible concerns

- 1. Tenant safety during installation** and use  
– Risk of electric shock if systems are installed incorrectly or without appropriate electrical knowledge.
- 2. Electrical load** – Introducing PV generation through standard household sockets may place additional stress on the existing electrical infrastructure
- 3. Fire safety concerns** – Potential fire risks associated with panels, inverters, connectors and plug sockets, particularly where poor-quality equipment or DIY connections to the consumer unit are used.
- 4. DIY installation hazards** – Incorrect mounting could result in panels becoming loose or detached during high winds, creating a significant risk of injury or damage to property.



Heidi Wagner • 3 Apr

They should not be plugged directly into a three-pin socket, as these are intended for output only, and feeding power into them could overload the household electrical system, potentially causing a fire or tripping all the fuses. The solar power supply should instead be connected to the mains control box, allowing the power to be evenly distributed throughout the home without risk of overload.

Show less

👍 16    🗨️ 35    💬 Reply

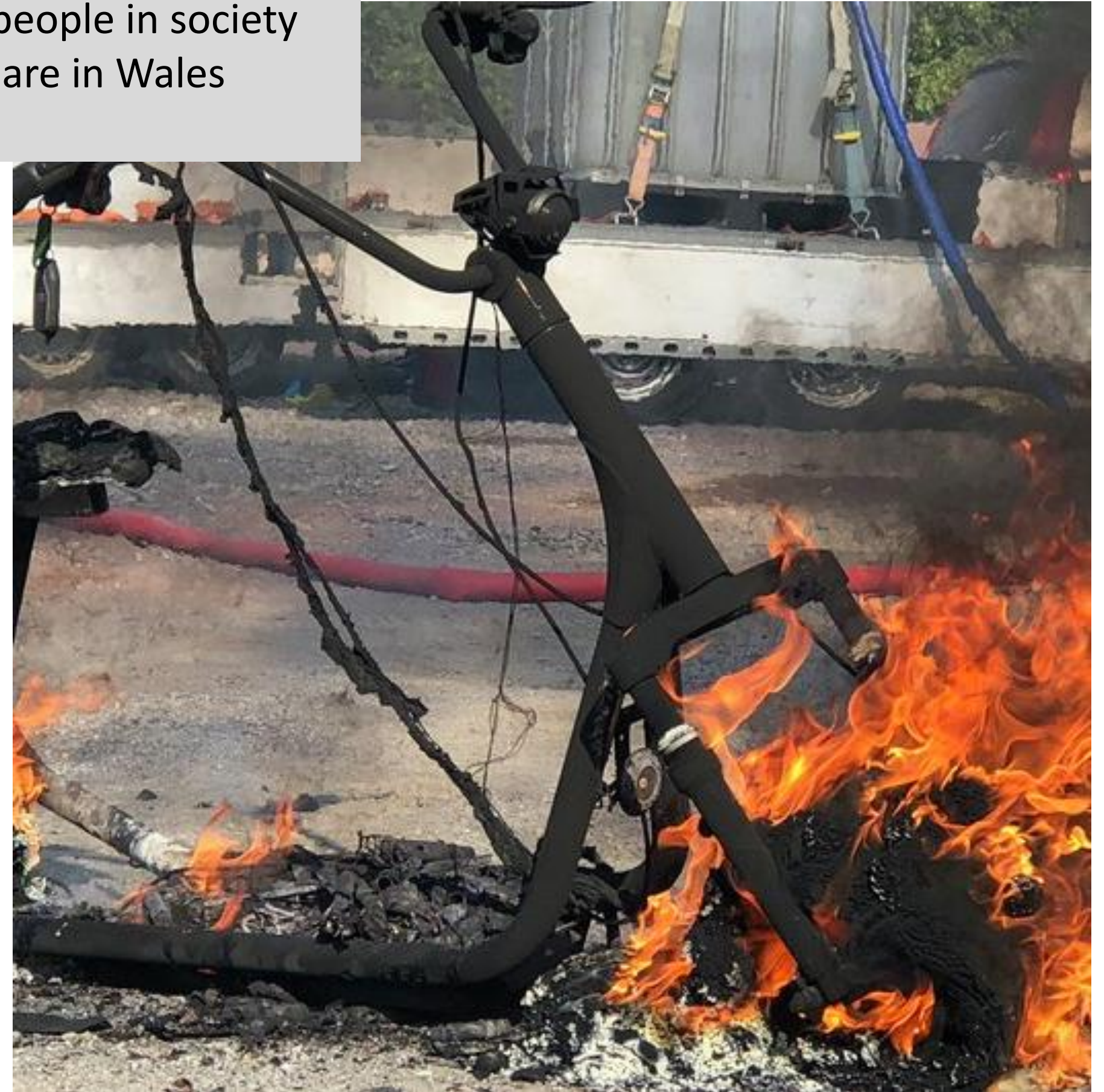
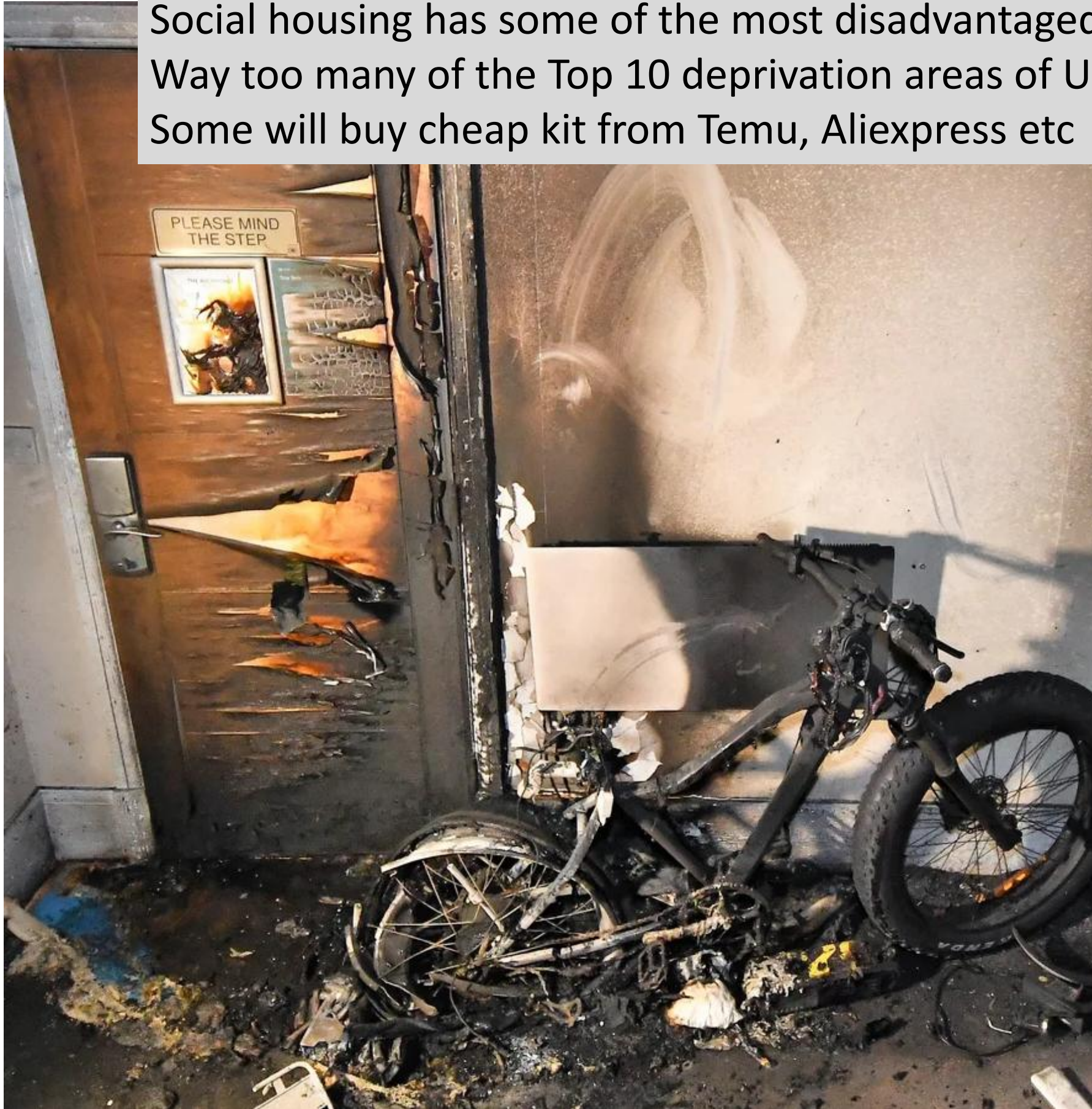
▼ See 8 more replies

Fear of buying cheap inferior kit

Social housing has some of the most disadvantaged people in society

Way too many of the Top 10 deprivation areas of UK are in Wales

Some will buy cheap kit from Temu, Aliexpress etc



Extra slide – to ‘make pretty’ later

## **Raised by landlord**

A UK socket had a decent head on it - if don't have an external socket then you need to drill a decent hole through wall/windows /EDI/IWI etc

Or cut the head off and rewire it the other side.



# Wider concerns for social housing?

- **Damage to the building fabric** – DIY installations may puncture roof membranes, external walls or cladding, and could accidentally damage hidden electrical cables, water pipes or gas services.
- **Visual impact** – Aesthetics on the balconies of flats or on side of houses., particularly in flats or conservation areas.
- **Potential increase in anti-social behaviour (ASB)** – Externally mounted panels may become targets for vandalism, theft or deliberate damage, leading to maintenance and safety issues.
- **Suitability of that home?** Risk of overload or back feed: Plug-in solar can create scenarios where parts of a circuit carry more current than intended, even if the circuit breaker appears to operate normally.  
Source: The [Institution of Engineering and Technology \(IET\)](#)

# Initial landlord thoughts

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- **Landlord policy** – A clear policy is needed on whether plug-in solar is permitted and under what conditions. If prohibited, this should be communicated early to avoid tenants incurring unnecessary costs and landlords being perceived as a barrier to reducing energy bills.
- **Reputational risk** – Refusing installations after purchase could lead to complaints, negative media coverage, involvement of politicians, the Ombudsman and tenant advocacy groups such as TPAS.
- **Non-compliant products** – Even if UK-compliant products exist, financially vulnerable tenants may purchase cheaper, non-compliant products from overseas marketplaces, as seen with e-scooters and battery products.
- **Unsafe connections** – Even high-quality systems could be plugged into extension leads or sockets not designed for continuous generation loads.
- **Enforcement challenges** – Tenants could unplug or hide systems during inspections, making unauthorised installations difficult for landlords to identify.
- **Building safety** – Balcony-mounted systems may introduce additional risks relating to falling objects, fixing strength, fire spread and compliance with emerging building safety requirements.

# Initial comments

- **800W is max for plug-in solar per unit** – how will this be regulated? checked with cheaper systems or multiple daisy-chained?
- **Off-grid vs household-connected use** – Even where permission is granted only for off-grid applications (e.g. sheds or workshops), how would the landlords check if plug in solar is being used or plugged into that household?
- **Battery safety** – Many kits include low-cost storage batteries, while online guidance promotes DIY alternatives using old vehicle batteries. Indoor installation or incorrect placement could introduce additional fire and safety risks.
- **Insurance implications** – Would existing landlord building insurance policies would cover plug-in solar and any associated damage. However, is this any different to an e-scooter?
- **Planning considerations** – Plug-in solar is widely expected to become permitted development, although restrictions may still apply to listed buildings, conservation areas and certain property types.

# Some initial TPAS Cymru Questions

- The tenant may want the SEGs even though it could be minimal – our understanding its not possible with this unless done a certain way with qualified MCS sparky etc – no different to full install
- However other Reddit forums explain how to send the G98 off yourself and don't need a MCS.
- When will DESNZ announce the date? Will RSLs need a policy in place? Or just see how it goes

# Conversation with WG

- **Is this risk any different to any other household risk – charging e-scooters etc ?**
- The plug-in solar should not be plugged into an extension lead as decent power is going in, but is that any different to plugging a washing machine and the fire risk from the power going out?
- Would tenants want to do this? – landlord should have plans for 'proper' roof solar
- It should be as safe as anything else if used properly.

# Developing advice to tenants

Plug-in solar won't be suitable for every home. Before buying a kit, you should check:

- Whether the product is approved for the UK market. Do not assume that a balcony solar kit sold in Europe is automatically suitable for a British home. **Look for products that are clearly designed and certified for UK use.**
- How the panel will be secured. A solar panel fixed to a balcony or wall **needs to be safe in wind** and bad weather. It should not create a risk to people below.
- How the cable will be routed. Avoid trailing cables through windows, across walkways or into places where they could be damaged. **Outdoor electrical equipment needs to be used safely.**
- How much electricity you use during daylight hours. The best savings are likely to come when you are using electricity while the panel is generating power.

# Tenant Voice and Engagement

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**Let's discuss. Concerns. Ideas. Questions?**



# Tenant Voice and Engagement

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## Next Steps, How can we help you?





**Diolch yn fawr for  
your time today.**