

Mallard Pass Solar farming is beyond the localisation of viable roof top installations

'We support Solar' is hailed by the media, politics and public's perception, exclaimed they are carbon free?

All applications should be stopped and rejected as no scientific analysis has been carried out or published to conclusively prove this! It is driven by industrialised business as a conduit to extensive profits and localised personal use as there is a belief, they will save money not the planet.

This acceptance of PV growth is the result of people having been green washed (the general public at large) Thereby having caused a distortion by not understanding the full and finite use of energy, the end-to-end real generation and release of carbon in the total process of manufacture, installing, decommissioning and disposing of PV panels. The true PV's panel carbon footprint.

Acceptance is based on a perception that the energy created by PV panels does not release carbon. This is a myth as the laws of physics control that you cannot use energy of any sort without releasing carbon or radiation. Apart from warming things up in direct heat from the sun. But, only warmed when the sun shines! What we get from the sun, is light - photons - and some of those photons become heat when they fall on the Earth's surface. It is some of those photons the PV panels use. But they are not available at night, so add the extra carbon release and serious hazard risk by a manufacturing and use cycle of combustible storage batteries for accompaniment.

*So, if as it is claimed PVs are the saviour of the climate! To have any leverage, find out scientifically where in the cycle, of this energy generated, its carbon is actually released?

*It's the same with Air source heat pumps £11.8 billion subsidised grant money available green washes over that one. You cannot just replace a gas boiler with Air Source Heat Pumps in existing dwellings. They are best positioned in highly insulated, triple glazed, large area under floor water Central heating with very large specialised domestic storage tanks. As in winter when the heat is needed it is not readily available. Air source pumps cannot raise the water to a required 60c to kill off legionella and for heating requires larger radiators and heated floor areas. They can achieve 50c in the system at best, hence the requirement for larger appliances to be able to heat and store enough water for baths and showers and larger radiators to heat a converted property to any where near an acceptable temperature. And have to run continuously to achieve this.

*Hydrogen and Ammonia are carbon free fuels but to make them into a usable fuel will take an enormous amount of consumed energy consequently releasing carbon. Many are blinded from the glow on the horizon being fuelled by Hydrogen, it works as a fuel but try manufacturing and storing it uses huge amounts of energy to generate, has to be stored as a high-pressure gas up to 10,000 psi to have any calorific value within a reasonable space and to get it to a liquid to be viable to bring it from Australia, it has to be pressurised and cooled to -250c the energy savings and pollution reduction do not equate!

*All three have the potential to speed up any influence man has on global warming!

Thereby, **You can fool most of the people all of the time,**

It is time to consider the technical scientific implications, past the emotional and controversial planning issues, past the valid ranting of the loss of this and the loss of that, and concentrate on the measure of carbon this end-to-end process will generate. This is the only way forward to convince the Civil servants, Politicians and Green washed society they are backing mis construed ideals.

Physics also has to lay bare its facts in the capture of fossil energy from the sun which can take billions of years to accumulate and milliseconds to dispose of, predominately into heat redistributed to space. As you should all be aware of from basic science cultured at school, you cannot dispose of matter only change its state.

Before you get to the photon of light which is converted in to energy via the PV cell, dubbed as free of generating Carbon release, there is an immense amount of Carbon released in the manufacture process end to end including the decommissioning and wastes generated which if calculated in total will be greater than if you leave things as they are.

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A re-focus on developing ways of greater efficiency in the use of fossil fuels there by releasing less carbon is a better truer more fulfilling way forward.

An investigation into end-to-end use of energy has to consider the carbon released by: -

- the mining of the quarts, processed in to usable silicon,
- the manufacture of chemicals to produce the PV cells,
- the process of manufacture its self,
- the manufacture of the infrastructure,
- the transport of the infrastructure,
- the assemble of the infrastructure, cable laying, fencing etc.
- the manufacture of the inverters needed from DC to AC
- the mining of cobalt and its manufacture in to lithium-ion batteries,
- the chemicals to produce flow batteries and all of the infrastructure to construct these on site,
- the carbon released in decommissioning and disposal,

This becomes a huge carbon footprint, all for a minuscule period of relative use of electricity production, 25 years of daylight hours multiplied by the poor light efficiency in the UK.

It will be far better to not do anything and stop this political play by civil servants, misguided politicians and the companies using the fooled green wash to reap the misled government grants that are being thrown out in the hope they will secure carbon neutral by 2035. When all of the grants have been consumed and the country side is littered with PV farms and the companies chasing the money fade away. Future Governments with the electorate will be left with the clean-up bill

You cannot get away from this perception without scientific evidence 'We completely agree with generating solar energy and other alternative energies',

These continuous comments embraced by the general public even those protesters to a PV farm that is next to them.

'Yes, to solar, No to Mallard Pass' We support Solar technology; We do not support Mallard Pass'

Would they actually speak out if it was miles away such as *"the Energy firm Sunnica has submitted plans to build a 2,792-acre solar farm and energy storage infrastructure on the Suffolk and Cambridgeshire borders."* no just continue to support miss guided perceptions. Both applications would be supported by each of the others communities and their protests would be deemed to be hypocrites and Nimbyist by each other.

The only way is to stride out by gathering scientific evidence as to the real elephant in the room, 'the true carbon foot print profile'. But how can the general public obtain scientific evidence, even if any scientists are brave enough to make known such findings or admit to the elephant, they will be quickly green washed away?

One day, when it has inflicted enough carbon release, society will look back and discover the loss of all of the green land associated with this phase of delusion will not have been worthwhile and will be staring at a mess left in previously good agricultural fields.

Submission by John Bavister