

TOP 10 TIPS

FOR O&Ms



MEET OUR FOUNDER

John Davies CEng is a charted engineer and has over 16 years of experience in the Energy sector. A former station manager of Uskmouth Power Station and Operations Director at Cobalt Energy, John has amassed a huge amount experience in power generation asset development, construction, commissioning & operation, and has operated at senior management & board level for over 10 years.

"My journey has taken me from the black of fossil fuels to the clean & green of renewables. My passion is all things renewable & sustainable. I want to make a positive impact on the world by encouraging, educating, promoting & deploying emerging energy solutions to decarbonize our planet."



WHERE DID THESE TIPS COME FROM?

Over the last two years our founder John Davies CEng has been working on his debut book which is set for launch on 3rd November 2021. During his research and picked up over the last ten years visiting over 10% of the UK fleet, John has created a suite of 'Top 10 Tips' pdf's which are referenced in his book and offer Developers, Asset Owners, Asset Managers, Policy Makers, EPC's, O&M's and TA's a condensed list of recommendations to make utility scale PV better. Whether that be improving operational assets, applying lessons learnt from the UK solar boom, or deploying quality focused services for the wave of subsidy-free new build sites. We would encourage you to apply as many of these recommendations as you can and share these pdf's far and wide. We hope you enjoy.

TOP 10 TIPS: O&Ms

Decide what type of O&M you are

Are you a bankable, serious player with financial support behind you and you wish to gather market share and compete with a small number of other big players, or are you more of a gap filler, providing bits and bobs for larger O&M's. This is important because you are either one or the other. Don't waste your time or money tapping on a locked door in the margins, I did that for too many years and regret the time and money I wasted.

2 Health & Safety is your top priority

The O&M is where the operational risk sits. You need to establish a safety system of work, electrical safety rules, an authorisation system and make sure its fit for purpose and manageable. If you get this wrong, someone will get hurt or worst still die. You do not want to be responsible for this.

3 Invest your time in your systems and documentation

I'm still surprised at the shocking state of documentation, systematic controls and reporting within the O&M sector. This needs to be matured and you need to get this right.

4 Utilise the latest software

Whether that be digital-twin portals and Apps for maintenance inspection records, or your data monitoring and reporting systems, there are multiple software options out there for you to improve the quality of your service and reduce costs.

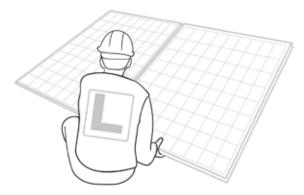
TOP 10 TIPS: O&Ms

5 Push for O&M contract reform

ost O&M contracts are extremely bias in the asset owners favour, hold generic scopes, pointless tasks, vague arse-covering clauses and have no incentives for O&M's to do more than they need to. Educate asset managers and owners about this. Show them that if you change this, you can bring more value. More than anyone in the market.

6 Invest in training & competency

Your teams are at the highest risk from electrical hazards, lone working and traffic related incidents, so its absolutely essential that you provide your staff with more than an induction and buddying them up with another technician. Invest in utility scale solar training and competency management systems. Shit roles downhill, and O&M's are unfortunately at the bottom. See 2DK's training courses at: www.2degreeskelvin.org/training



Outsource specialist areas

No O&M can provide every possible service under the sun when it comes to solar. Many have tried to internalise cleaning, grounds maintenance, aerial inspections, HV works, specialist testing and investigations etc, but it hasn't worked in most cases. Create partnerships with vetted and trusted specialists so you can concentrate on the solar PV side of things and scaling. These specialists will reduce risk levels, provide high quality services and output documents and avoid significant investments and unnecessary cashflow challenges.

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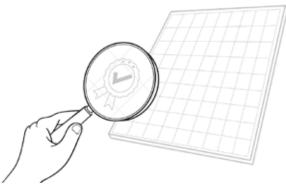
TOP 10 TIPS: O&Ms

8 Seek assistance with major projects

With the best intentions in the world, you probably see yourselves as the ideal outfit to carry out sizable solar farm revamp and repower projects. You are in contract with the asset owner, you know the site and you think to yourself 'how hard can this be?' The reality is that you are not set up for highly complex, design & data loaded, retrofit projects like this. Partner with a specialist in this area who can provide an end-to-end wrapped solution, from feasibility and optioneering, through to project delivery and system handover. You as an O&M are already under pressure, do not put yourselves under any more.

Read your scopes and carry out regular compliance audits

Its essential that from a contractual perspective you are doing the tasks and activities which you are contracted to do. Ensure that the understanding of all scope items is shared by all parties. Be vigilant with evidencing everything you do, so you can prove you have covered all of the scope. Asset managers are circling above like vultures waiting for you to drop the ball, so they can prove their worth. Don't let them point out the gaps in compliance.



Talk about what you're doing

O&M's need to champion excellence. I understand that in some cases asset owners don't want you blabbing about the snail-trails you've just found on one of their sites, so you need to be sensitive to this sort of thing, but we need to share ideas and best industry practice. Its how we will advance as a sector.

Want to read more? Check out our Founder's debut book, due for launch 3rd November 2021

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SOLAR BOOM **BOOK LAUNCH**

The global demand for green energy has never been higher, and it's set to soar.

There's never been a more critical time for us to harness the power of the sun, and with the world deploying solar photovoltaic (PV) technology more quickly than ever, we need to get it right.

Offering insights from the frontline of the utility-scale solar industry, Solar Boom sets out the pathway to success and how to avoid mistakes in your new-build pipeline, whether you're a solar newbie or a veteran. E-BOOK LAUNCH 3RD NOV



- Who's who in the utility-scale solar industry
- Strategies to revamp and repower your portfolios
- How to enhance your ageing and underperforming assets
- The key mistakes of the subsidy-driven solar boom and how to avoid them
- The future of solar PV and its potential to save the world from the effects of climate change

The insider's guide to the utility-scale solar industry

Book Testimonials

"John's passion for renewables is highly contagious and his call to fight to save the plant is powerful. His inspiring book is particularly accessible to those with little to no knowledge of solar energy and gives great insight into the UK Solar Boom: the what, who and why. Buckle up and enjoy this solar coaster!"

Arnoud C. Klaren Head of Projects, Quintas Advisory

"A comprehensive but easy to read book about the whole solar powered universe. Providing an in depth knowledge especially for those people entering the professional solar business."

Erik Lohse

Solar Quality Expert and Creator of the MBJ Mobile Lab

"A must read textbook for the utility scale Solar PV industry! John, articulates clearly and dives deep into the details, addressing the issues and providing applicable solutions. Whether you are a newcomer in the industry or a seasoned professional, this book is the one that you will always refer back to."

Ypatios Movsiadis

Wattcrop Managing Partner & City University Postgraduate Lecturer



BOOK YOUR FREE CONSULTATION

If 2DegreesKelvin can add value, we will design an optimised solution bespoke to your requirements. If we are unable to assist, then we'd be pleased to make introductions to other independent specialists.

Book your FREE 30 minute consultation with our Founder & CEO John Davies CEng.



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