



Renewables – Simple Technology, Complex Risk

Onshore Energy Conference – Dubai 17th April 2019

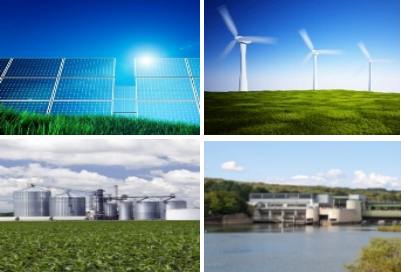
Our Knowledge, Your Power



Today's Agenda

- Introduction to GCube
- Some of the issues with writing renewable energy
- Real life claims – what goes wrong
- Cyber
- Concluding Remarks

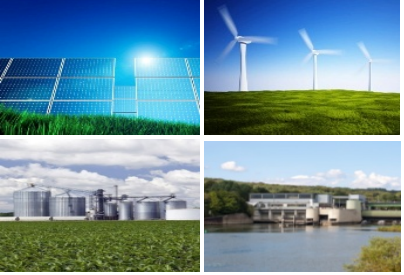




GCube a Brief Overview

- We are an MGA based in London, New York and Newport Beach
- 62 People
- USD120,000,000 in Gross Written Premium per annum
- Property, Liability and Marine (Cargo)
- Our capacity mainly comes from Lloyd's of London
- Over 25 years experience in the class
- Can deploy up to USD700mm in capacity any one project
- Focus on wind and solar, though entertain other renewables

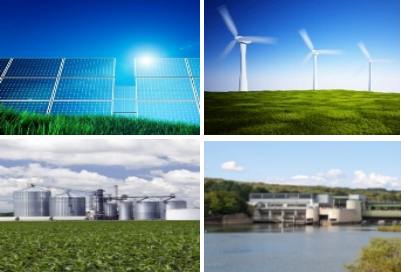




GCube a Brief Overview

- We came from a very privileged position - no competition!
- Everyone wants to be in the renewables space
-and most have tried (and some have failed)
- Its ethically the 'right thing to do'
- Its growing (everything else is shrinking}
- Its cool!

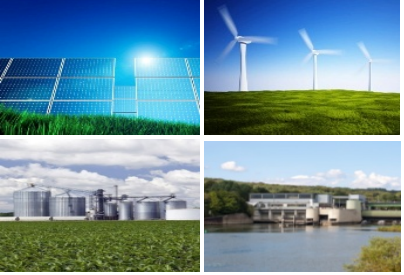




.....or is it?

- On average (last 10 years) 500 claims per annum
- Over 90% of claims are below USD250,000
- Result: Claims team are as large as the underwriting team
- It's a highly attritional problematic book that needs constant management
- If the losses don't kill you the admin will!



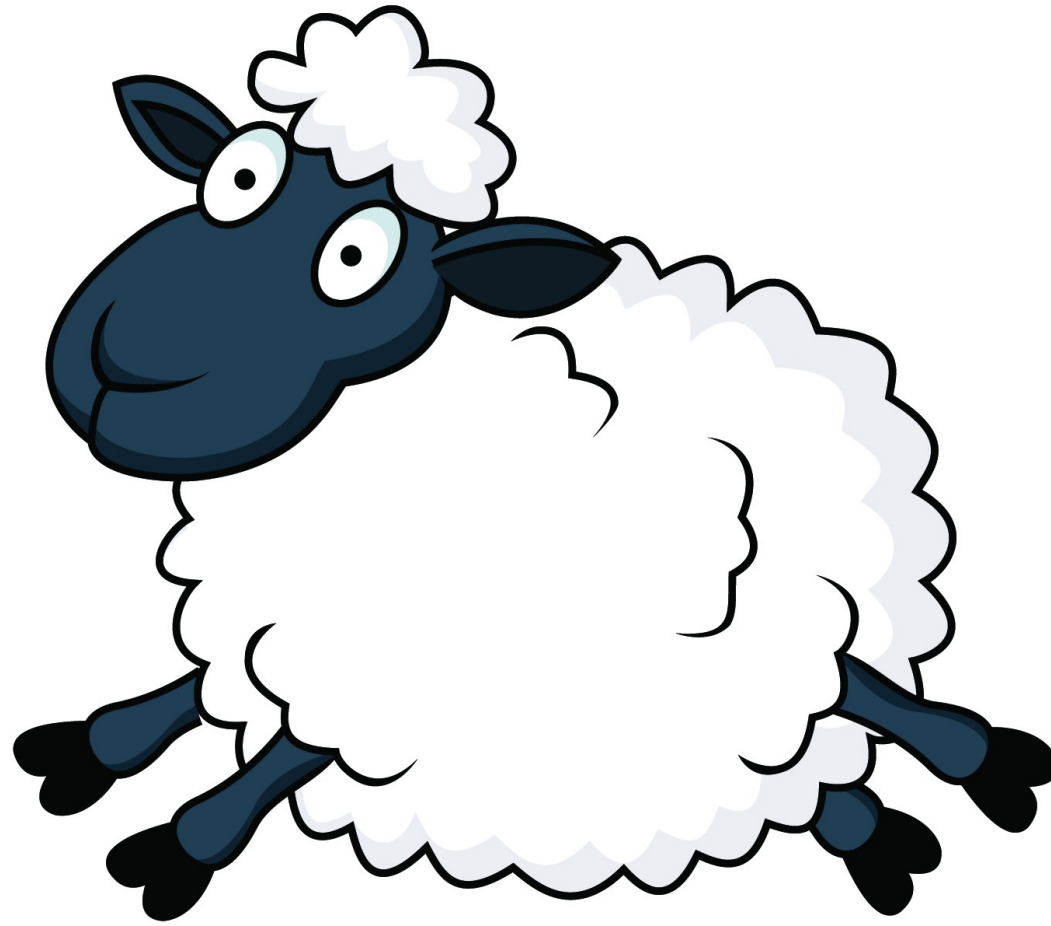


Real Life Scenarios





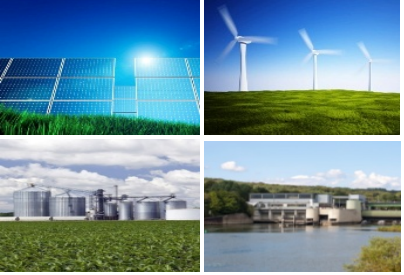
Cause of Loss.....?





Tornado Alley?



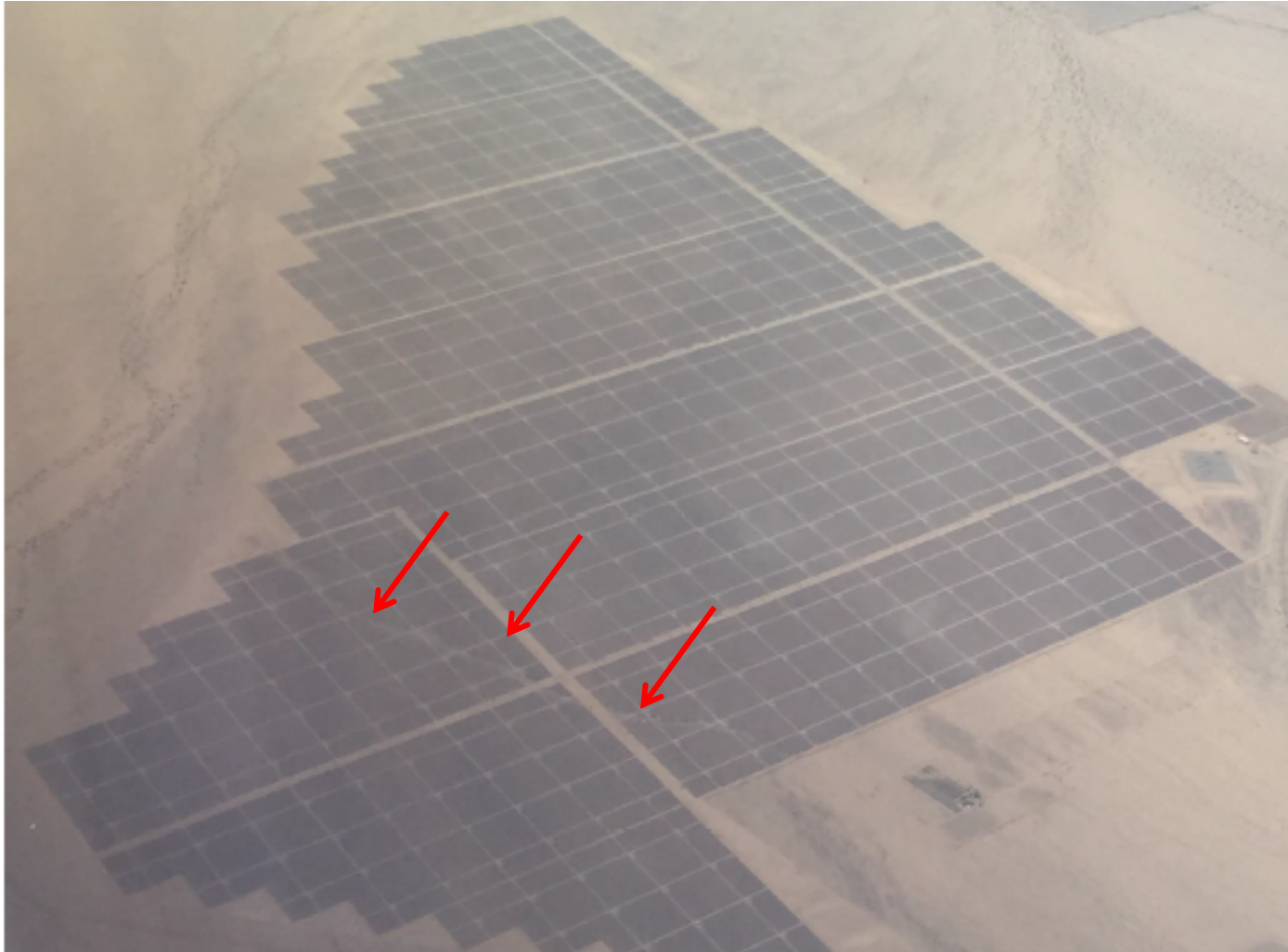


Tornado Alley?





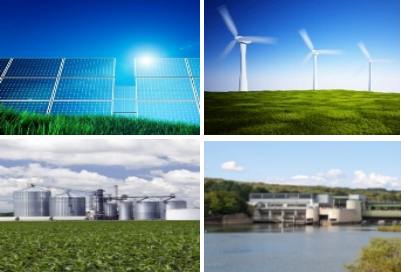
Putting it into Perspective





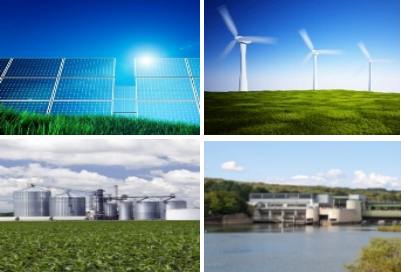
Topography and Panel Angle Matter





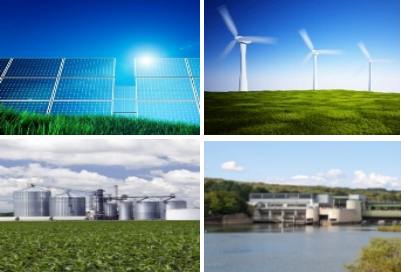
And obey the law!





The Illegal Mess to Clear Up





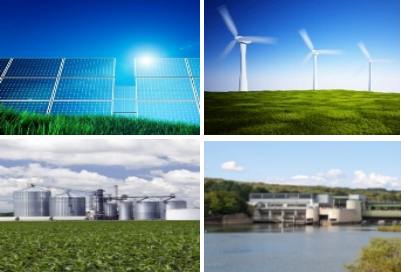
And More.....





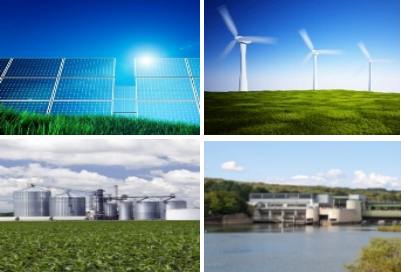
Little Damage - Big BI





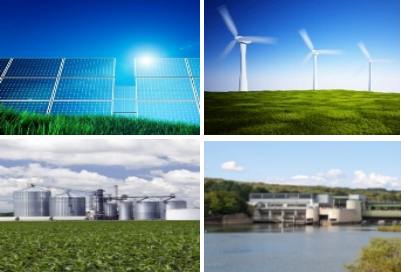
Inverters – The Good





Inverters – The Bad





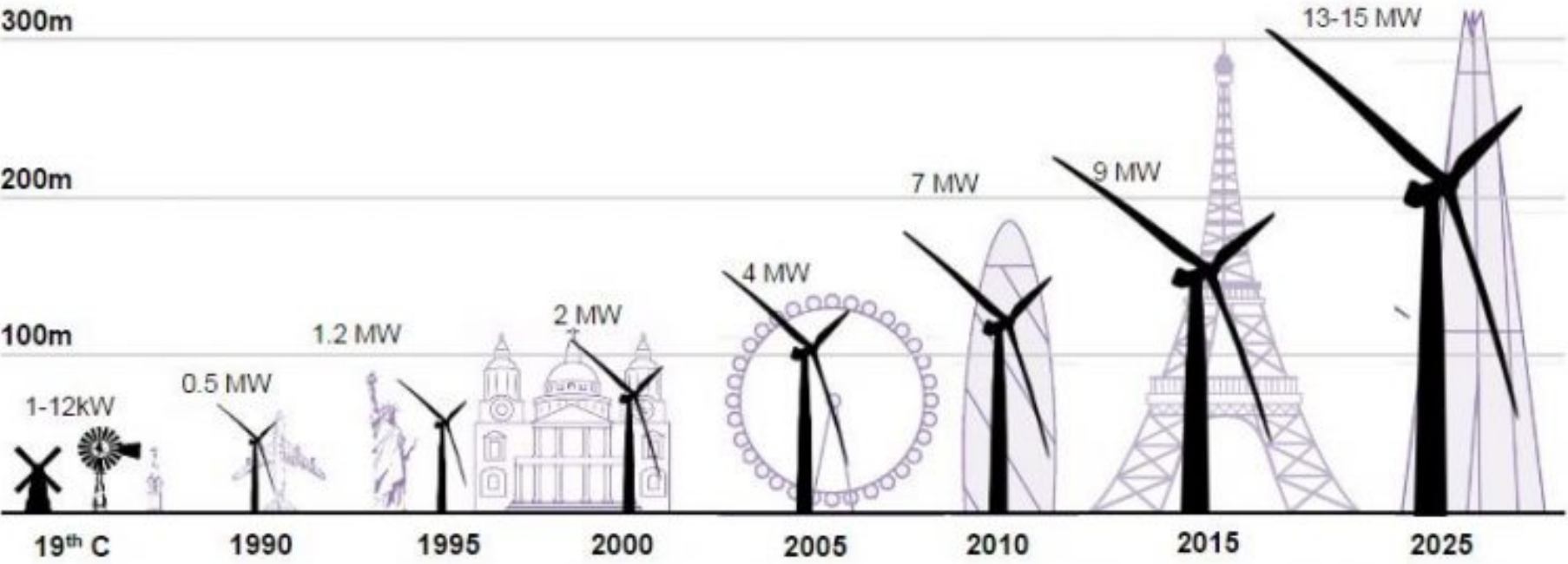
Let's Talk About Wind



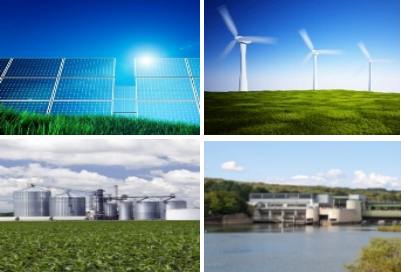


Evolution

Evolution of wind turbine heights and output



Sources: Various; Bloomberg New Energy Finance



4/21/19





Evolving Technology

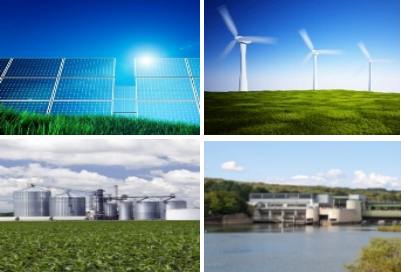


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Pad Mount Transformer





Pad Mount Transformer



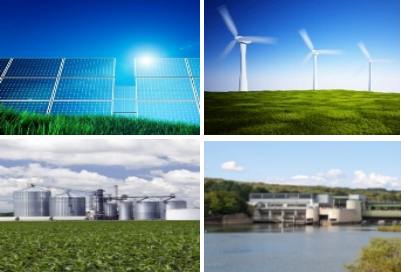
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Battery Storage





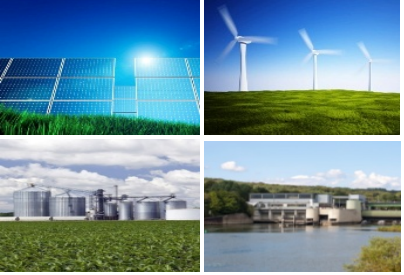
Scale of the Cyber Challenge

114 Billion



85 Billion





Does It Matter?

If you're NOT being hacked by the Chinese, you've got to ask yourself if the stuff you are doing really even matters"





Cyber Insurance – where?

ONLINE

On line hackers
Ransomware threats

OFFLINE

Theft of laptops
Lost cell phones
Obtaining physical access to a Wind Farm
or Solar Project*

* demonstrated by the university of Tulsa in 2016





Ooops, your files have been encrypted!

English

What Happened to My Computer?

Your important files are encrypted.

Many of your documents, photos, videos, databases and other files are no longer accessible because they have been encrypted. Maybe you are busy looking for a way to recover your files, but do not waste your time. Nobody can recover your files without our decryption service.

Can I Recover My Files?

Sure. We guarantee that you can recover all your files safely and easily. But you have not so enough time.

You can decrypt some of your files for free. Try now by clicking <Decrypt>.

But if you want to decrypt all your files, you need to pay.

You only have 3 days to submit the payment. After that the price will be doubled.

Also, if you don't pay in 7 days, you won't be able to recover your files forever.

We will have free events for users who are so poor that they couldn't pay in 6 months.

How Do I Pay?

Payment is accepted in Bitcoin only. For more information, click <About bitcoin>.

Please check the current price of Bitcoin and buy some bitcoins. For more information, click <How to buy bitcoins>.

And send the correct amount to the address specified in this window.

After your payment, click <Check Payment>. Best time to check: 9:00am - 11:00am

CMT from Mondays to Friday

Payment will be raised on

5/16/2017 00:47:55

Time Left

02:23:57:37

Your files will be lost on

5/20/2017 00:47:55

Time Left

06:23:57:37

[About bitcoin](#)

[How to buy bitcoins?](#)

[Contact Us](#)



Send \$300 worth of bitcoin to this address:

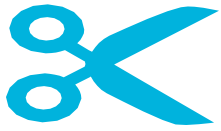
12t9YDPgwueZ9NyMgw519p7AA8isjr6SMw

Copy

Check Payment

Decrypt

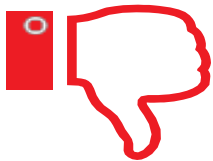
Cyber Insurance – who?



A malicious external actor – criminal, political including terrorists



Internal employee – approached by criminals or blackmailed

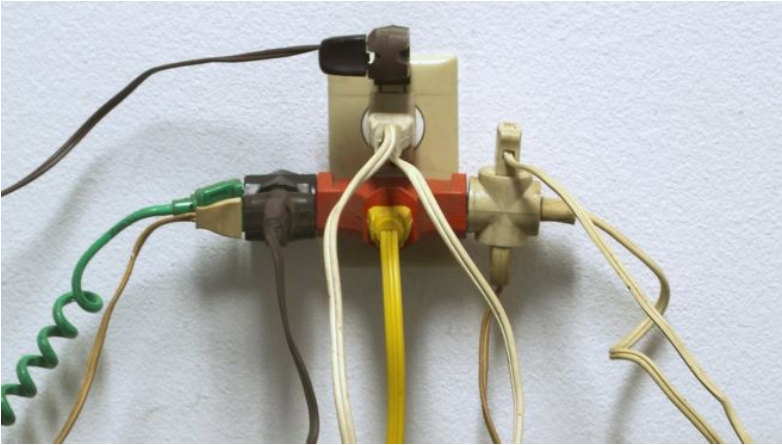


Internal employee or contractor – human error, clicking a link etc.



Low tech third party vendors with access

Is This Real?



Russian hackers have won remote access to the control rooms of many US power suppliers, [the Wall Street Journal reports](#).

- State-backed hackers won access even though command centre computers were not directly linked to the web.
- The attacks succeeded by targeting smaller firms which supply utilities with other services.
- The attacks used emails sent to senior staff or sought to make them visit spoofed or hacked social media sites,
- They won access, they carried out detailed reconnaissance to familiarise themselves with how US power systems worked.



The Silent Question

Not addressing 'silent cyber' could lead to ratings downgrades - Fitch warns

Fitch wrote that “substantial cyber risk resides beyond the standalone market, via unintended or in some cases intentional inclusion in traditional commercial insurance policies, known as “silent cyber.” The potential for a major cyber loss event while the exposure remains unmeasured and policy language remains grey creates serious uncertainty”

Silent Cyber Could Kill You(r Loss Ratio)





Conclusions

- Renewables are not a simple risk
- Don't assume your property underwriters can 'handle it'
- Treble the staff in your claims department
- Beef up Systems and Controls and be Prepared for a lot of Admin
- Over 80% of Solar claims will come from Natural Perils
- Over 80% of Wind claims will come from Internal Perils
- Cyber is real..... Its coming to a project near you very soon



Questions?

