



Vattenfall Case Study

**Reducing risk and
cost in onshore
wind operations.**



**Managing a major onshore
wind farm is no easy task.**

**Every aspect of the plant, from
access roads to turbine tips, must
be checked on a regular basis to
ensure production is optimised
and safety is not compromised.**

Staying up to date with all these
checks is a huge task in itself.



At Vattenfall's 76-turbine
Pen y Cymoedd project,
the highest-altitude wind
farm in the UK, even routine
inspections of the site, the
plant's medical equipment
and workers' personal
protective equipment
(PPE) were
taking up
many days of
administration
time.





**We were recording vital information
and data onto a spreadsheet.**

That spreadsheet was getting copied to a PDF which was getting uploaded onto one system and then filed in another system, across all three sorts of inspections. **It just took forever.”**

Mark Rayner, Service Leader

A background image showing several wind turbines silhouetted against a sunset sky with orange and purple hues. A red magnifying glass icon is overlaid on the right side of the image.

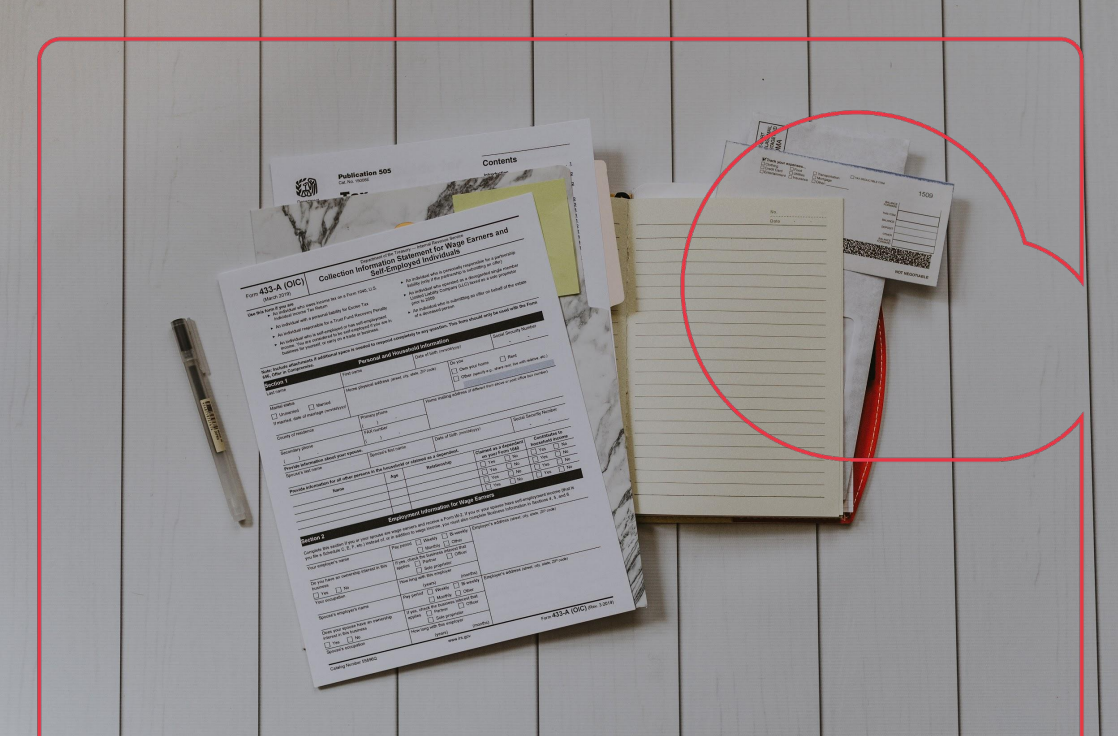
Each of the inspections is vital for a different reason:



Monthly medical equipment checks are required by Pen y Cymoedd's insurer.

Monthly site inspections, covering 86 km of tracks, are key for Vattenfall's duty of care towards the landowner, Natural Resources Wales.

6-monthly PPE inspections, which cover items such as helmets and harnesses, are essential in maintaining an unblemished health and safety record.



The challenge facing the Pen y Cymoedd team was how to capture the inspection results quickly and efficiently.

The admin process associated with site inspections alone amounted to around a couple of days a month.



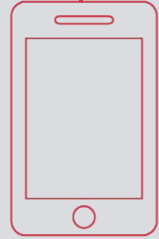
In September 2018, the Vattenfall team became aware that an inspection tracking platform called Papertrail was being used with great results at one of the UK's biggest offshore wind farms, Gwynt y Môr, off the Welsh coast.

The Pen y Cymoedd team decided to try the platform for a couple of months.



As part of the installation, Papertrail offered full training even though the platform is highly intuitive to use.

Based on the time savings it delivered, Papertrail was installed as the data platform for all site, PPE and medical equipment inspection results.



The time Papertrail
saves us is just phenomenal.
Anybody who's relatively
computer savvy could use it.

Papertrail's support is second to none,
making it easy to get answers to questions.

The backup has been absolutely
superb from day one."



After implementation the Papertrail team went one step beyond the original specification and started working on ways to improve usability and adoption further, for instance by **sending out alerts and reminders when inspections are due.**



As soon as it was installed, Papertrail began making inspection admin a lot quicker and easier.

The quality of the data captured in the first place improved dramatically, because there is less scope for transcription errors.



A significant additional benefit of the platform is that it is open to any authorised user, so people carrying out the inspections are less likely to fill in low-quality reports.



Because the whole team has access to Papertrail, reports are now much more detailed and accurate than before.

Before using Papertrail, all reports came back to me, so there were occasions when they weren't filled in as thoroughly as they needed to be."

Mark Rayner, Service Leader



Papertrail's customised app includes a set number of inspection states, allowing Vattenfall to quickly prioritise workloads, and improving the quality of reports.

Papertrail makes it quicker and easier to capture evidence of issues.

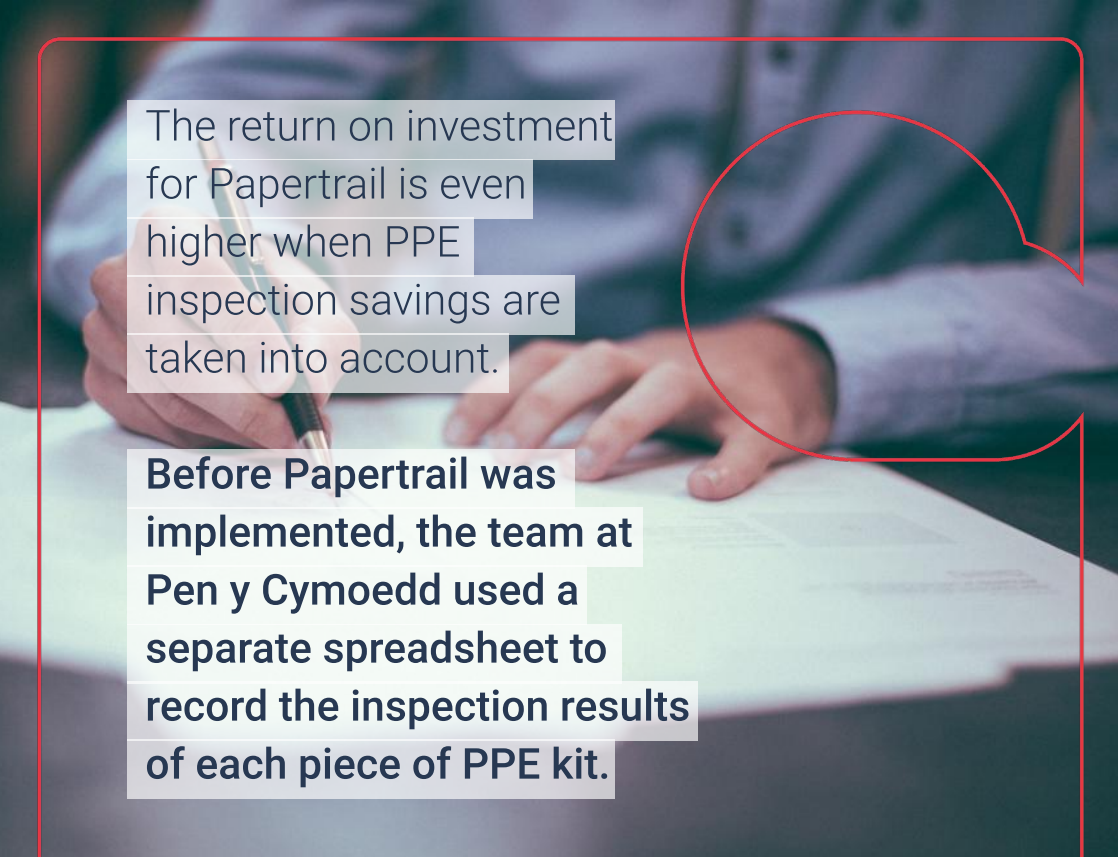
Multiple images can be uploaded on to the platform rather than having to send separate images via email.

Thanks to Papertrail's improved efficiency and reporting, the Pen y Cymoedd team estimates that a week's worth of administration has been reduced to a single day.



It's not just their time that is saved.

The contractors that Vattenfall uses for site remediation at Pen y Cymoedd are also able to log onto Papertrail, and now use the tool to get ahead on repairs without having to wait for a request from the plant operator.



The return on investment for Papertrail is even higher when PPE inspection savings are taken into account.

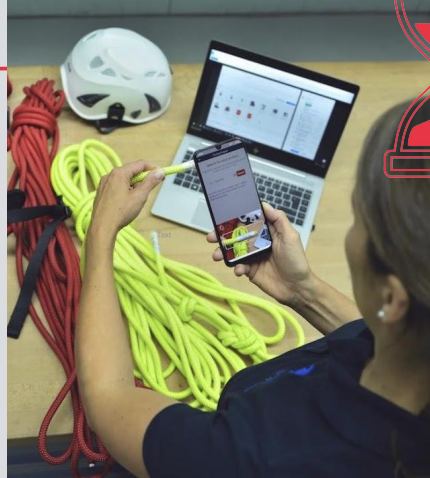
Before Papertrail was implemented, the team at Pen y Cymoedd used a separate spreadsheet to record the inspection results of each piece of PPE kit.



The information from each spreadsheet had to be loaded up onto a PPE register, **a process that took more than two weeks to complete.**

The first time the Pen y Cymoedd team used Papertrail, they did it in two and a half days.

This time has been reduced even further now that the Pen y Cymoedd team has bought a bar code reader and barcoded each PPE item.



The latest PPE inspection at the wind farm lasted just a day and a half.

The PPE benefits don't end there: because each technician checks their kit before using it, they can log faults on Papertrail themselves if they encounter a problem.

Plus they can also check to see if the fault had been spotted the last time an inspection took place.

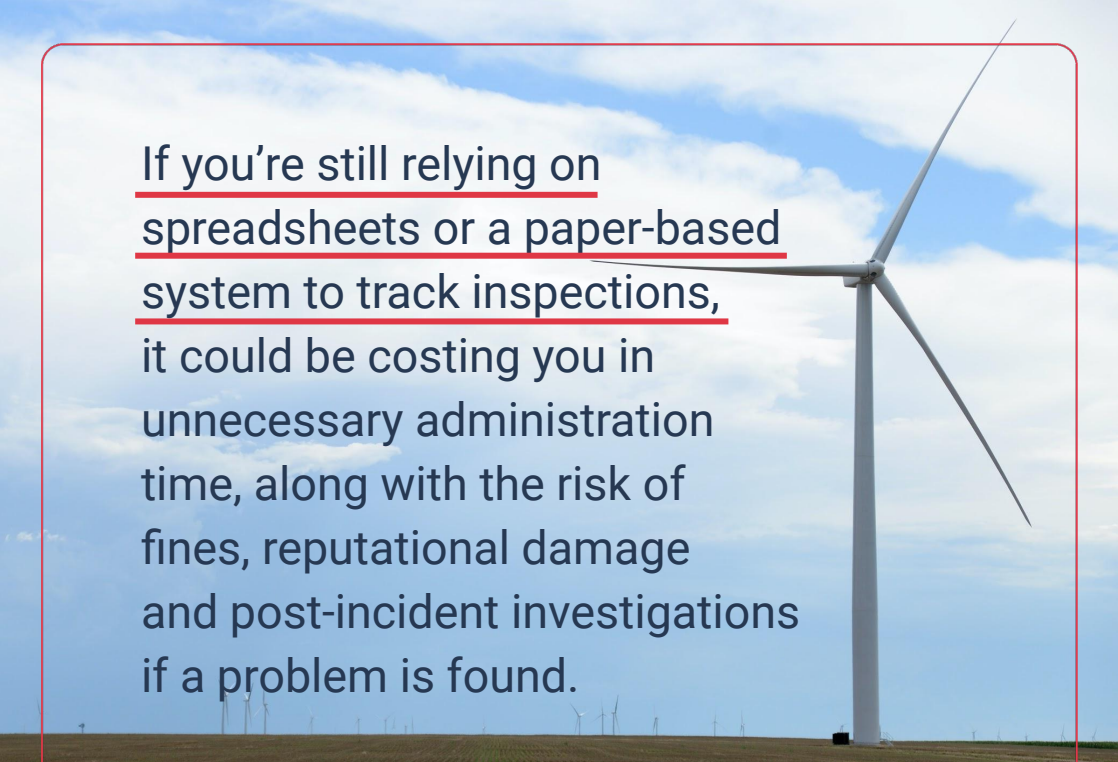
This versatility is leading the Pen y Cymoedd team to extend the way it uses Papertrail, for instance to include vehicles or for portable appliance testing.



One valuable feature being investigated is to track the age of spare parts held in stock, as it is not usually clear how much warranty is left on them.

Keeping the age of each spare part in Papertrail could help Pen y Cymoedd make sure spares are not sitting out their warranty periods on a shelf.

Start reducing your risk and cost today.



If you're still relying on
spreadsheets or a paper-based
system to track inspections,
it could be costing you in
unnecessary administration
time, along with the risk of
fines, reputational damage
and post-incident investigations
if a problem is found.

Find out how you can run a
smarter, safer service today with

papertrail 

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