The Industry Standard for a safer and more productive workforce

Employer benefits
What are GWO Standards?

GWO standards are created by the industry, for the industry. They reflect the risks a wind turbine technician faces at work.

Training providers, certified according to GWO criteria, deliver GWO courses and have lower development costs, with the savings passed on to the industry.

Employers accept the training of technicians educated outside their own companies if they are GWO certified.

This means they do not have to retrain them in the basics; they avoid duplicating training and technicians are available for an increased number of productive workdays on site.

Most of our members have standardised over 30% of their basic training for wind power technicians in this way, creating a safer and more productive workforce.
Chairman’s Introduction
What’s in it for you?

Executive Summary

Five measurable benefits of GWO standards
1) Safety
2) Productivity
3) Standardisation
4) Locally sourced training
5) Supply chain alignment and contract certainty

Methodology
What’s in it for you?

Eloy Jauregui – GWO Chairman/Safety Director, Acciona Energia

If you want to innovate, you have to start doing some things the same as everyone else.

GWO creates training standards and we encourage the industry to think in this way. This is not always a popular message in a competitive industry and working together to standardise is no easy task, especially when technology is moving quickly, and the pressure is on amidst a rapidly falling cost of energy.

In fact, standards are sometimes viewed as contradictory to innovation. Some argue they reduce choice or lock us all into.

However, GWO members recognised many of their training programmes were very similar already.

They understood basic safety and technical training could be standardised. This has created benefits up and down the wind energy supply chain.

**Today, GWO members spend less developing basic training programmes**

which offer us little or no competitive advantage. Instead we can innovate as employers with our own learning development programmes, adding value to the professional lives of our technicians.

We can also recognise the validity of a training certification framework that we trust because we designed the standard ourselves.

**GWO standards reflect the safety risks we know our technicians face.**

The benefits for contractors are even bigger. If you have one training standard, and ten customers, it’s much cheaper and easier to train everyone in the same way.

In this report, we are holding a mirror up to our own standards. Do they offer value for the industry? Do they keep technicians safe? What is in it for you?
Benefits in summary

There are major advantages to the wind energy industry from operating within a standardised basic safety-training framework.

Added together, GWO members agree they amount to a safer and more productive workforce.

GWO trained technicians now represent between 5-10% of the global workforce in wind energy. In 2019, GWO’s biggest growing markets were China, India, North America and Latin America. It is here were the benefits of standardisation will be most keenly felt.

When more people receive a GWO training, the benefits increase.

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Raising safety standards

The GWO framework aligns industry safety and technical training standards, which are common to all wind energy companies.

Our mission statement is to “create an injury free working environment” and the first step towards achieving this has been to improve the overall quality of safety training for the industry.

GWO members and independent service providers working within the GWO framework agree with the statement that GWO has improved the alignment and quality of basic safety training standards.

By definition, GWO has improved the alignment and quality of safety training because we now have a standard delivering a baseline of competence. As an owner/operator of wind turbines, we wouldn’t allow anyone to work on site without the certification.

Dr Jill Lees, Director of HSE and Sustainability, E.ON Climate & Renewables

The BST has improved the alignment and quality of basic safety training standards for the global windpower sector

62% Strongly agree
19% Agree
19% No opinion
Productivity

The majority (60%) of GWO members service multiple turbine brands and deliver service contracts for other owner/operators.

The objective for GWO members in creating the first BST standard in 2012 was to remove duplication from the training of wind turbine technicians. Sometimes they were re-training experienced technicians from the ground up to meet their own bespoke safety training requirements. In other situations they might be required to deliver a unique training matrix for a specific turbine or customer.

Members agree that since they have adopted the GWO framework, reduced duplication has saved them money and allowed technicians to be more readily available for work, in some cases by as much as 5-6 additional productive work days every year.

For every GWO certified technician we employ/contract we can expect them to be available for

- 30% +4 days on site each year
- 40% +5 days on site each year
- 10% +6 days on site each year

Technicians with a GWO BST certificate can be deployed on site for more working days each year than those without

- 44% Strongly agree
- 19% Agree
- 31% No opinion
- 6% Disagree
Standardisation

More than two thirds of GWO members have standardised over 30% of their entry level training programmes.

The combined duration of the BST and BTT in their current versions (13 & 5) takes 70 hours to complete.

The BTT requires no refresher training and the BST refresher standard requires 27 hours’ training (version 10) every two years (refresher frequency depends on jurisdiction and local regulations).

Therefore, employers responsible for tens of thousands of wind energy technicians have implemented standards amounting to over two weeks’ instruction at entry-level and have standardised a considerable portion of their training.

The organisations who benefit most from the lack of duplication are either the owners with multiple turbine brands in their portfolio, or a contractor working for one of the manufacturers.

*John Barrie – Head of Technical & Safety Training, Vestas*

What proportion (%) of your entry-level training programme do the BST and BTT standards cover?

- 67% – 30+%
- 17% – 16-20%
- 8% – 11-15%
- 8% – 6-10%
Locally sourced training

A global network of GWO certified independent training providers has stepped up to the plate to meet the expectations of wind turbine owners and manufacturers.

Since 2012, companies have invested in fixed facilities, on-site and mobile training facilities to open hundreds of available locations.

This market has given employers options to train technicians locally to their homes or close to an installation, manufacturing, service or other wind turbine industry operation.

The network is growing rapidly, with the fastest expansion anticipated in North America, Latin America and China over the next three years.

“The opportunity in North America is huge. We have thousands of employees and contractors; all need basic safety and technical training and we want to ensure GWO training is available at many more locations in the US and Canada.”

Brian Walencik - EHS Director North America, GE Renewable Energy

Independent training providers help to keep basic training costs competitive

19% Strongly agree

56% Agree

25% No opinion
Supply chain alignment and contract certainty

When standards are present, a foundation of mutual recognition exists between contracting parties. When standards are supported by a robust third party audit and compliance model, there is no longer any argument over what type of safety training a supplier should provide or what type a customer should expect.

GWO standards are increasingly established as contractual pre-requisite helping align the safety training activities of the whole supply chain.

Asked to rank five potential benefits of the standardised framework, 11 out of 17 respondents said ‘established as contractual expectation’ was the second most important benefits of a global standard.

“GWO does the trick. As primary contractor, we engage in multiple dialogues with our suppliers. We can specifically define our expectations into how they deliver raw manpower into our projects.”

Hasse Andreasen - Director, Head of HSE WindPower, Ørsted

Please rank the following benefits of GWO standards

1 = most important  5 = least important

1. Established as contractual expectation
2. Improved safety/fewer incidents/injury
3. More efficient sourcing of labour
4. Option to outsource non-core training
5. Utilise training budget for proprietary needs
METHODOLOGY:

The GWO members survey

We surveyed 12 of the 17 GWO member companies in addition to four independent service providers (ISPs) who operate within the standardised framework. GWO member respondents are collectively responsible for substantial installed capacity (figure 1). The whole sample of 16 respondents including ISPs is represented in Figure 2, indicating the number of technicians employed or contracted by the sample group.

67% of respondent companies service multiple turbine brands. Of those who do, the number of brands varies from 1-2, to 8-10 (Figure 3). This is an important factor in determining key benefits of standardisation, including duplication of training and the availability of technicians for more productive working days.

Wind energy companies increasingly deliver service contracts for 3rd party manufacturers or owners. This trend is identified in Figure 4 which shows seven of 12 GWO members do so.

![Fig. 1 Number of Megawatts installed - GWO members](image1)

![Fig. 2 Techniciansemployedorcontracted(allrespondents)](image2)

![Fig. 3 Turbine brands serviced (all respondents)](image3)

![Fig. 4 Deliver 3rd party service contracts](image4)
ABOUT GWO
Global Wind Organisation is a non-profit body founded by leading wind turbine manufacturers and operators, to create a safer and more productive workforce.

GWO members strive for an injury free work environment in the wind turbine industry, setting common international standards for safety training and emergency procedures.

FIND OUT MORE
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