



GLOBAL WIND
ORGANISATION

Safety without borders

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Chairman's statement



Eloy Jauregui
Safety Director
Acciona Energía

In 1486, Christopher Columbus presented to the Catholic Kings his project to open a route through the Atlantic to reach the East Indies, requesting resources for it. He didn't convince at the first, but six years later, he voyaged across the Atlantic and landed on the island of Guanahani, later baptized as San Salvador, in 1492.

This quest for resources continues today and GWO's pioneering leaders have stood not before kings, but captains of industry to make their case. Following the same analogy of Columbus' discovery, those pioneers of GWO have invested these resources to create the most influential organisation of its kind in the world.

Determined to create an injury-free working environment in wind, GWO drafted its first training standard in 2012 and formalised its member collaboration agreement in 2014.

By 2019, our organisation had matured. 17 companies representing five of the top 10 global owner operators and eight of the world's largest turbine manufacturers had come together on the understanding that only a truly global organisation can support training development for a market growing at approximately 50GW of new capacity each year.

Today, we operate across three continents via the GWO Secretariat, China

Committee and North American Committee. We are looking to a future where GWO no longer limits itself to training development but puts the workforce's competence at the heart of everything we do.

As Chair for the past two years, I am very proud. We have stuck to a motto that forces us to do things well and responsibly: *"GWO by the wind industry and for the wind industry"*. This will be my final statement and personally, I leave with a sense that I have fulfilled my own duty. In March 2020, I will hand over to my duly elected successor who I am sure will bring the same spirit and enthusiasm that I have had for the GWO project during these last years.

CEO's Report

2019 has been an exciting and productive year for Global Wind Organisation. Guided by our members, we now have training providers delivering third party audited safety training according to GWO training standards in 42 countries. 76 new training providers have been certified bringing us to a total of 354 training sites by year end. This global community has provided safety training within our trusted framework, and almost 90,000 people representing 194 nationalities now hold a valid GWO training certificate having completed at least one of the 24 modules of standardized safety training.

In this report, we present every aspect of GWO as an organisation and global community. We do so in the spirit of transparency as an industry led, not-for-profit body which strives towards an injury-free working environment in the global wind industry through member

and stakeholder collaboration. We hope this report delivers value and we welcome any feedback that may help us improve the work we do.

Operations

WINDA fit for purpose

Our training records database, WINDA, shows 494,618 courses delivered¹ by the end of 2019. This amounts to almost 200,000 additional courses delivered in a single calendar year. WINDA has proven itself enormously valuable to the global wind community and we have taken bold steps in 2019 to future proof this asset via a migration to a new Microsoft Azure Platform. Now operating on an even more robust architecture, WINDA is positioned to support the ambitions of our industry. Looking to the future, our ambitions are to continue to grow the global community and more than double the work-

force with GWO training, which means the database load will increase several times over.

Fees reduced and aligned with United Nations Index

From 1st January 2020, fees for WINDA credits - the charges for uploading a training record - were reduced on average by 18% in line with our not-for-profit status. The new fees align with the United Nations Human Development Index (UN HDI). This means the fee reduction is greater in lower income countries compared to higher income countries and introduces a fair and equitable pricing system for all stakeholders, reflecting the cost of human development in all markets. The WINDA fee is a small part of total training cost, but aligning to The UN HDI is the right thing to do. The fee should not be a barrier to making GWO training accessible worldwide. The UN HDI is



Jakob Lau Holst
CEO
Global Wind Organisation

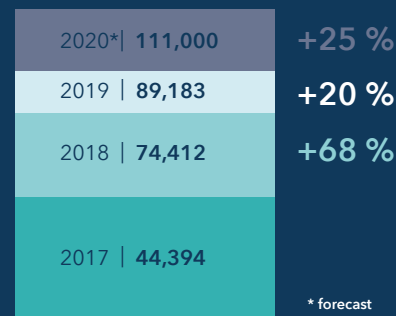
updated yearly and the WINDA fee will be updated to match.

Audit & Compliance

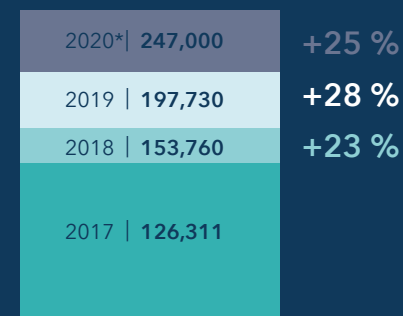
Quality Assurance Programme

We have instigated a wide-ranging programme to enhance the quality assurance of GWO training. This ongoing process will see the publication of new Requirements for Certification Bodies and Training Providers in April 2020 introducing additional quality control measures. Updates to the requirements in April 2019 have already proven a success for governance and quality. We have provided training to auditors in eight global markets, and only certification bodies who have documented conformance, may now certify a GWO site. The result is a new authorised list of certification bodies published on the GWO web site. By the end of 2019 this list contained 44 certification bodies on four continents.

GWO Trained Workforce



GWO Modules Completed



Standards Development

Global Alignment

This project began in 2019 and will see newly aligned versions of GWO standards published in October 2020. Working groups in North America, Australia and China have reviewed every document to ensure they are fit for purpose also in those markets. Other markets will join the project over the next three years, supported by GWO's Safety Without Borders strategy. The effort has resulted in various changes, improvements and additions to the global standards, and assured participating stakeholders, that the standards can be quickly deployed in those markets without questions over local legal or regulatory interpretation.

Global growth

China Committee

The GWO China Committee was established in 2017. Under the guidance of its chair Mr Qin Haiyan (CEO, China Wind Energy Association), members have made significant strides, most notably developing of Chinese translations of GWO Standards themselves. Now published on a dedicated web site, the translations can be implemented by an increasing number of training providers, helping to bring safety standards to this world-leading market.

North America Committee

Committee Chair Brian Walencik (Wind EHS Director, Americas, GE Renewables) has driven this committee forward on two fronts since its formation in Feb-

ruary 2019: A working group is aligning all GWO standards with established norms in the USA and Canada, and a bold training provider recruitment campaign is underway, aiming to increase the availability of GWO training in all wind states, on and offshore.

Training report

In 2019, GWO training providers trained 197,281 (+28%) courses covering nine training standards and 24 individual modules. The GWO trained workforce rose almost 20% year on year.

- **Worldwide adoption accelerates:** In 2017, 14,292 modules (12%) were completed outside Europe. By 2019, this had risen to 39,601 (21%).

- **More standards:** Training providers are shifting from an exclusive portfolio of 4-5 Basic Safety Training (BST) modules. In 2018, BST represented 97% of all GWO training. 2019 new training standards accounted for 11%.
- **Organic growth:** BST grew consistently in 2018-2019. (+19.9% 2018 - 17.2% 2019). Total BST modules rose to 176,764.

2020 Forecast

The addition of four new standards has driven up volumes of training by 28%, while the GWO trained workforce has increased 19.8%. We have forecast an ambitious combined growth target in 2020 aiming for +25% of GWO trained workers and modules. And with even more growth in the coming years.

Safety Without Borders

- Strategy 2020-2022

GWO's mission is to strive towards an injury-free working environment in the global wind industry. Our goal is to establish globally accepted and standardised safety training in all wind markets.

Our three-year target is to more than double the number of technicians receiving GWO training on a regular basis. We will build a training provider network that delivers globally recognised, quality assured safety training to at least 200,000 technicians by the end of 2022.

The five key components in this ambition are as follows:

1. Maintain a strong focus on quality assurance of training delivered at all training centers throughout the world. Growing the global community of

training suppliers while maintaining confidence in quality of training requires not only smarter control measures, but also more detailed guidance and enhanced support to certification body auditors and certified training providers. The next step is to improve the governance framework for the certification process, which means our requirements for auditors and for certified training providers will be updated in April 2020. Going forward, we will require still more data from auditors about training quality and from training providers about incidents during training. Both data sets shall enable GWO to improve safety and quality of training everywhere. Starting April 2021, Auditor Qualification Training (AQT) will become a mandatory requirement.

2. Help solve specific challenges when establishing new GWO Training centers in existing as well as new markets. In particular, we will expand Auditor Qualification Training worldwide in 2020, develop tool-kits for new training providers, and a global standard for GWO Instructor Training will be released for use in April 2021.

3. Promote global demand and recognition amongst the largest owners and employers with more than 1,000 technicians or 1000+MW of installed capacity and invite these to join GWO as leading members.

4. Drive local recognition in at least 10 large and emerging markets, through pioneer partnership initiatives with national associations and market leaders, supported by presence at selected

wind trade fairs in collaboration with Global Wind Energy Council (GWEC)².

5. Continue to develop and maintain a relevant portfolio of training standards aimed at technicians so that GWO modules always reflect top hazards and common needs in the wind industry workplace. In 2020 we will assess opportunities for increased digitalization to achieve better learning and enhanced cost efficiencies.

In parallel, GWO members will carry out a feasibility study to assess the potential for mutual recognition of employer-assessed competencies beyond those skills acquired through training.

The initiatives all support growing with confidence in quality.

Targets 2020-2022

Valid GWO records

2022 200,000	+35 %
2021 150,000	+35 %
2020 111,000	+25 %
2019 89,183	+20 %
2018 74,412	+68 %
2017 44,394	

Total modules uploaded

2022 450,000	+35 %
2021 333,450	+35 %
2020 247,000	+25 %
2019 197,730	+28 %
2018 153,760	+23 %
2017 126,311	

GWO training growth

	Annual installation capacity 2022 ⁴	GWO certified workforce 2022
China, India, Asia Pacific	36.5 GW	50,000-70,000
North America	6.5 GW	25,000-35,000
Europe	18.1 GW	100,000-120,000
Latin America	3.1 GW	5,000-10,000
Africa, Middle East	1.0 GW	1,000-5000

⁴) Estimate onshore/offshore. Source: GWEC Global Wind Report 2018

Certification bodies

Third party certification is a requirement for all GWO training providers. Certification bodies who audit GWO training providers must document their compliance with the GWO Requirements for Certification Bodies. Those that have done so appear in an authorised list on the GWO Web site³. At the time of publication, there were 354 GWO certified training providers across seven global regions. Over time, several certification bodies have built considerable market share. The graphics show the numbers of certificates issued by certification bodies in each region.

Auditor Qualification Training (AQT)
GWO introduced Auditor Qualification Training courses in 2019. In April 2021, AQT will become mandatory for all certification bodies auditing GWO sites.

Certification bodies are now required to document their compliance with the requirements, in particular that an

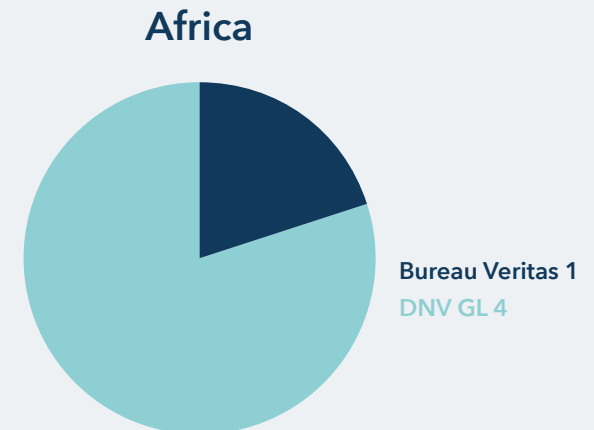
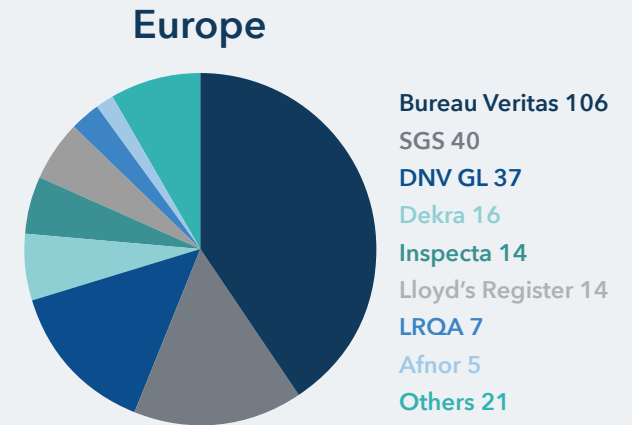
OHSAS 18001 or similar lead auditor can prove they had completed and/or witnessed a GWO equivalent to the training standard their audit was being performed against.

AQT supports this, by delivering instruction to lead auditors on how to correctly audit GWO training sites, with a focus on how learning objectives are achieved.

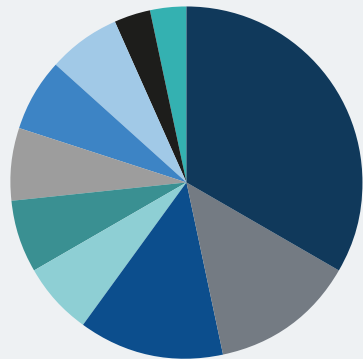
86 participants completed GWO AQT courses in North America, China and four countries across Europe in 2019.

As a key component of GWO's long term strategy, AQT courses are essential to encourage adoption in new markets.

12 courses will take place during 2020, with North America, Turkey, Brazil, Spain and Germany scheduled before the end of Q2.

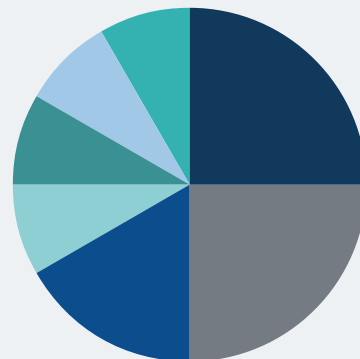


Asia



- Bureau Veritas 10
- China General Certification 2
- DNV GL 4
- Lloyd's Register 4
- LRQA 2
- OSS 2
- SGS 2
- TUV Rheinland 2
- Afnor 1

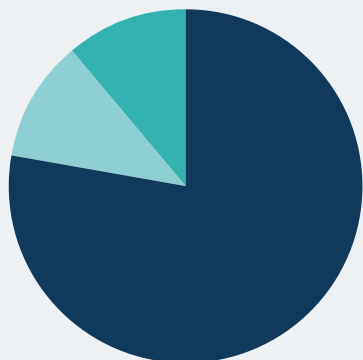
North America



- Lloyd's Register 3
- SGS 3
- Bureau Veritas 2
- DNV GL 1
- Inspecta 1
- LRQA 1
- NSF-ISR 1

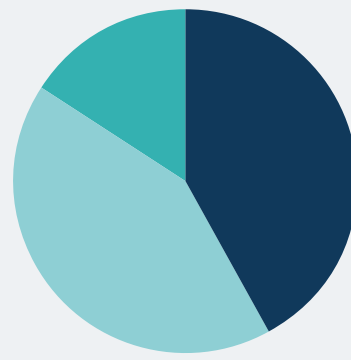
GWO training providers are certified by third party certification bodies. Some have built considerable market share.

Oceania



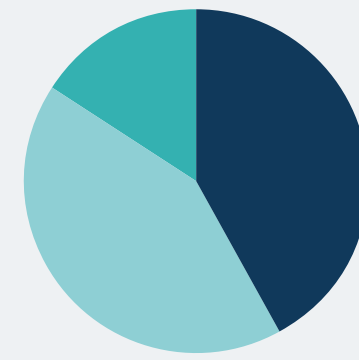
- Best Practice Certification 7
- Bureau Veritas 1
- DNV GL 1

Central America



- SGS 8
- Bureau Veritas 8
- DNV GL 3

South America

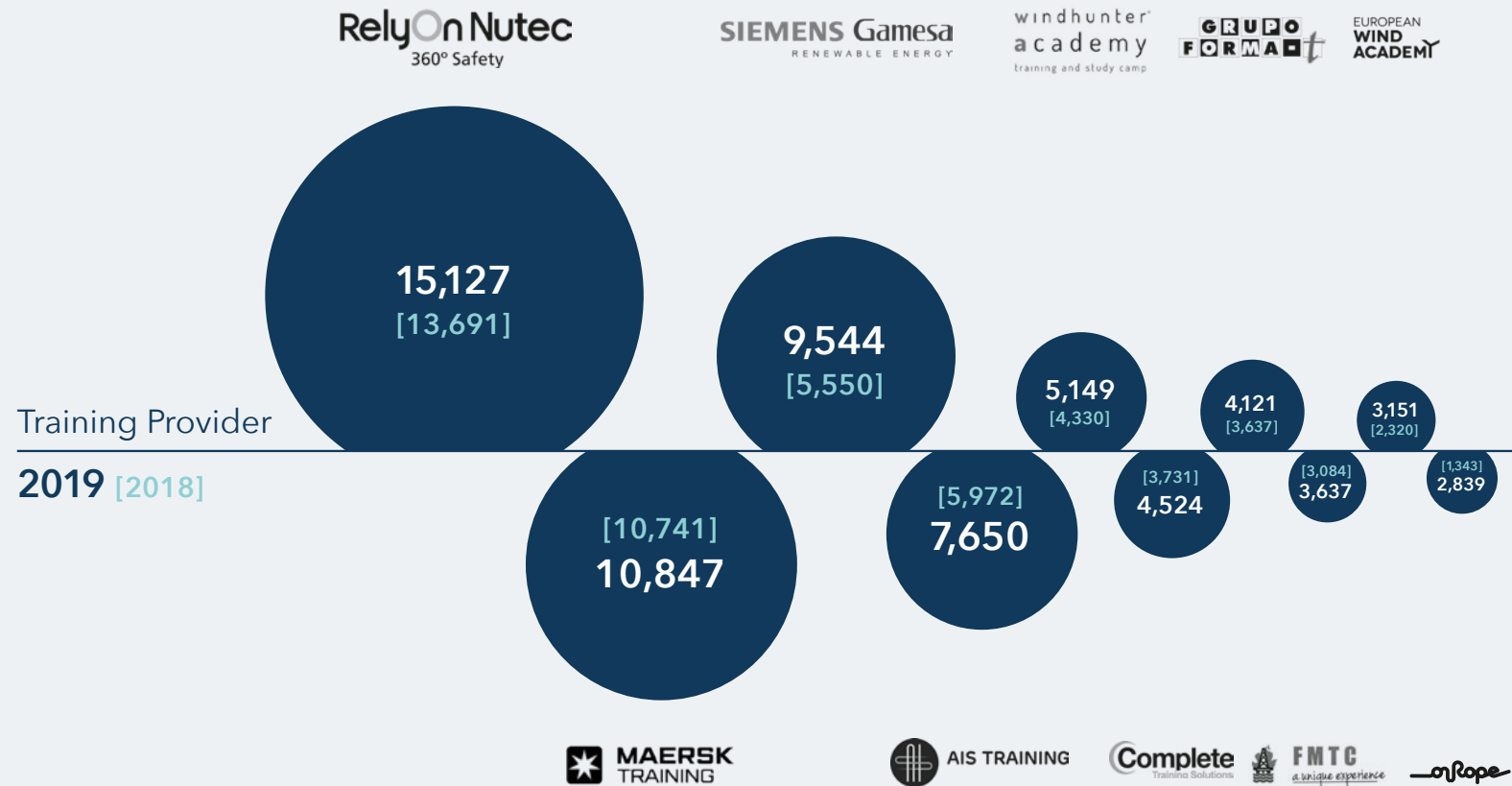


- Bureau Veritas 8
- SGS 8
- DNV GL 3

Top 10 Training Providers

The largest active GWO training providers completed 69,479 modules in 2019, a 14% increase on the previous year and 33% of the total. In 2018 and 2017 this group represented 37% of the total. The biggest mover calculated by modules alone was Siemens Gamesa Renewable Energy, which added a lot of Enhanced First Aid/Advanced Rescue Training, plus more than 1,000 BST courses at its site in China.

Other big movers included Portugal's OnRope, which more than doubled its numbers, European Wind Academy in Poland grew volumes by 36%, and AIS Training added 28% in 2019. Also from Poland, WindHunter Academy opened a second site in Germany (+18%). FMTC and Complete Training Solutions will be ones to watch in 2020, both having new sites in the U.S.A





	Basic Safety Training	Modules
1	RelyOn Nutec	12,812
2	Maersk Training	8,378
3	AIS Training	6,588
4	SGRE	5,899
5	Complete Training Solutions	4,181
6	FORMA-T	3,735
7	FMTc	3,637
8	Windhunter Academy	3,486
9	European Wind Academy	2,781
10	Salvacon SC. México	2,715

	ART & EFA	Modules
1	SGRE	2,153
2	RelyOn Nutec	1,864
3	Maersk Training	889
4	Offshore Painting Services	782
5	Windhunter Academy	547
6	OffTEC Base	408
7	Access Rescue Con. at Height	384
8	Complete Training Solutions	343
9	AIS Training	274
10	Taskmasters (UK)	241

	Basic Technical Training	Modules
1	Maersk Training	1,534
2	SGRE	1,492
3	EROM	873
4	AIS Training	770
5	Vestas	549
6	Windhoist	505
7	RelyOn Nutec	431
8	Windhunter Academy	421
9	OnRope Unipessoal	393
10	FORMA-T	386

	Blade Repair	Modules
1	Advanced Blade Repair Serv.	119
2	Altitec Academy	35
3	Maersk Training	34
4	Offshore Painting Services	23
5	Altitec South Africa	20
6	Rescue Center Denmark	18
7	Global Wind Consulting	15
8	AIS Training	9
9	Total Health Safety Enviroment	7

The GWO Network

There were 354 Certified GWO Training Providers around the world by the end of 2019. 76 new sites joined the family and we expect a continuing rise in numbers, especially in emerging markets, China and the United States during 2020.

Europe

Established markets for GWO training have adopted new standards quickly. Advanced Rescue, Enhanced First Aid and Basic Technical Training have been enthusiastically supported by training providers, who completed almost 13,000 modules from the expanded portfolio.

Asia

China and India have established several new training sites and are primed to deliver GWO standard training for a growing workforce. The largest single market on earth, China has enthusiastically

embraced GWO standards for on and offshore and over 3000 modules were completed there in 2019. India is following a similar path with focus on onshore only. The subcontinent saw even greater numbers of modules completed with almost 5000 uploaded by nine training providers.

Africa

Five training providers have established in South Africa which is leading the development of GWO on the continent. The country's government recently announced its final integrated resource plan including ambitions for almost 15GW of installations between 2022 and 2030, adding that wind will be the largest single component of its investment in the coming years.

Oceania

Australia installed an additional 529MW⁵ during 2018 and the market's

cohort of training providers supported members with training, especially in BST modules. Covering vast distances may make options such as on site training increasingly valuable as these markets develop.

South America

With Brazil occupying 8th place in the world's onshore wind energy marketplace and 3% of total global installation in 2018⁵, efforts to introduce GWO standards in the region have begun delivering results. Many new certifications and a doubling of training modules delivered across the continent is extremely positive news. Now with 8000+ kilometres of shallow coastline, the market awaits Brazil's ambitions for offshore wind with keen anticipation.

Central America

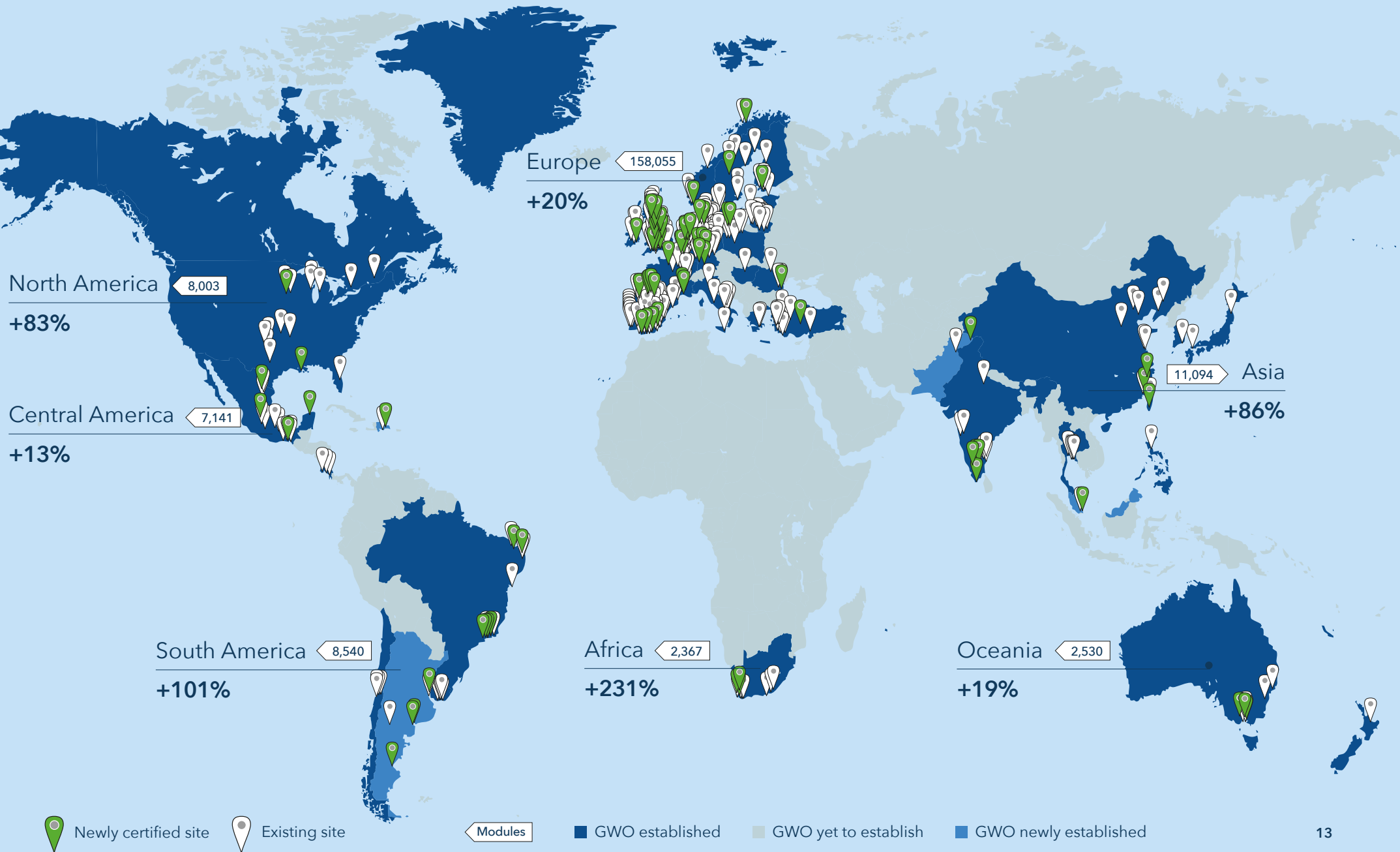
Mexico increased its installation activity by almost 500MW year on year during

2018⁵ and the region has historically had a strong presence amongst GWO training providers. We have witnessed a more modest increase in the volumes of training across Mexico and the rest of Central America after more rapid growth during 2017-2018.

North America

Over 1000 Basic Technical Training modules and a rapid rise in Basic Safety Training (6800+) over 2018 has seen North America become one of the fastest growing regions in the world. With targets to reach beyond 10,000 modules completed in 2020 and a doubling in the number of training providers, GWO members are committed to establishing standards in the USA and Canada.

GWO Certified Training Providers 2019



GWO Help Centre

- Customer Service Report

In 2019, The GWO Secretariat began collecting information on its own performance to help drive continuous improvement.

With the worldwide adoption of GWO standards increasing across the globe, we must ensure a direct channel of communication between the Secretariat, our members, training providers, certification bodies and the technicians who complete training.

Thus, it is vital we maintain a functional and fast customer service to serve our stakeholders.

GWO implemented a ticketing system in late 2018 and throughout 2019, the GWO Help Centre was able to solve

inquiries and accurately monitor performance to ensure quality.

The answers you need

The GWO Help Centre's primary objective is to deliver solutions to stakeholders in the most efficient way possible. In 2019 we solved 99% of the enquiries (tickets) made to us within 24 hours.

Another metric we have employed is to see how frequently a request (typically an email to info@globalwindsafety.org) can be answered and solved with a single answer.

In 2019, of almost 3300 tickets created, 61% were solved with a single answer (One-touch tickets). Our objective in 2020 will be to drive up this number.

A global help centre

The GWO Help Centre is open five days a week from 0800-1600 Central European Time. Emails arrive from at least 42 countries where GWO training providers are located and range from everyday questions like "I have lost my WINDA ID and can't log in" to highly complex financial, operational or administrative tasks.

We speak to people in every time zone, and during 2019 we answered anywhere between 14-41 tickets per day. Peaks in activity occur around the times GWO updates its standards or criteria and our aim is always to ensure smooth operations so stakeholders receive a quality service .

Satisfaction score

Those of you who have contacted the GWO Help Centre will have noticed a request to provide feedback.

We strongly encourage you to take the time to rate how your enquiry has been dealt with. This allows us to drive improvements in our service and manage any problems that could be occurring.

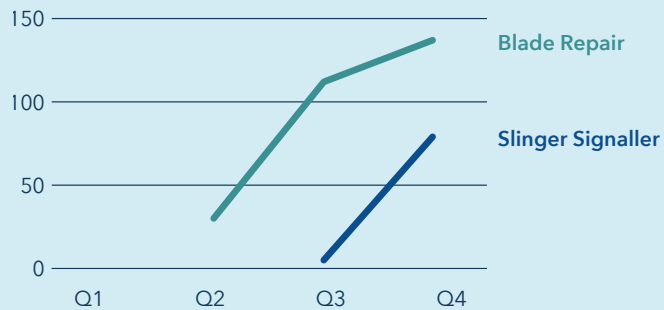
In 2019, the feedback for GWO's Help Centre was very positive. Monthly satisfaction levels ranged between 86% and 98%, only dropping beneath 90% for three individual months of the year. Positive feedback was given from 703 ratings, while negative reviews occurred only 63 times.



In 2019 we solved 99% of the enquiries made to us within 24 hours.

New in 2019 – Slinger Signaller and Blade Repair

Modules



BR Training Providers 2019: 9
SLS Training Providers 2019: 7

As GWO has matured, our members have driven standardisation forward, adding to a global system of skills that can be recognised by the world's largest wind energy employers.

In 2019, this work continued with the introduction first of the Blade Repair (BR) Standard in April, followed by the Slinger Signaller (SLS) (AKA Rigger/Signal Person) in October.

Blade Repair is GWO's most ambitious training standard in terms of the scope of its learning objectives. A ten-day course, encompassing a range of technical safety and craftsmanship elements, the standard has been enthusiastically received by employers and technicians.

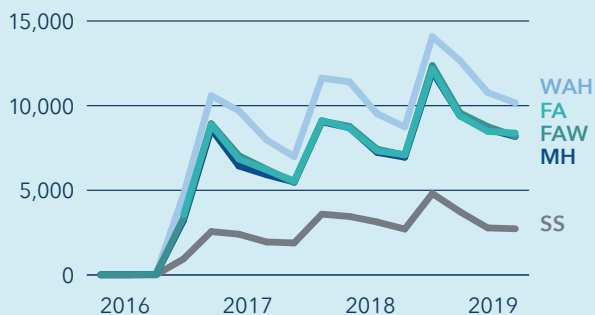
By the end of 2019, almost 300 people had completed the GWO Blade Repair module and with further training providers likely to certify in 2020, we are confident the training has filled a much needed requirement in the market.

Slinger Signaller (Rigger/Signal Person) launched in October 2019 and was developed to standardize a universe of over 400 existing certificates and training courses worldwide. Participants learn to support and care for themselves and others when attaching and detaching loads to and from a crane.

84 modules were completed in the first quarter following launch and we look forward to a successful first year of operation for this much needed training standard.

Basic Safety Training

Modules



Training Providers 2019: 275 2018: 235

	Total	+/-	Refresher courses	Refresher %
2017	125,684		36,697	29%
2018	150,714	+19.9%	49,436	33%
2019	176,764	+17.2%	62,518	35%

The five modules of Basic Safety Training (BST) – Working at Height, Fire Awareness, Manual Handling, First Aid and Sea Survival continued to grow in 2019.

Seasonal trends were broadly maintained, with a ratio of 56:44 in the amount of training completed during the first half of the year compared to the second. The growth in training in markets across the southern hemisphere may shift this dynamic over time

Three of a kind

The trio of Fire Awareness, Manual Handling and First Aid saw virtually identical numbers of modules completed in 2019, peaking in Q1 at around 12,000 of each to a low of 8000 in Q4. Once again, working at height is completed on a more frequent basis, never dropping below 10,000 trainings per quarter.

Sea Survival Slump?

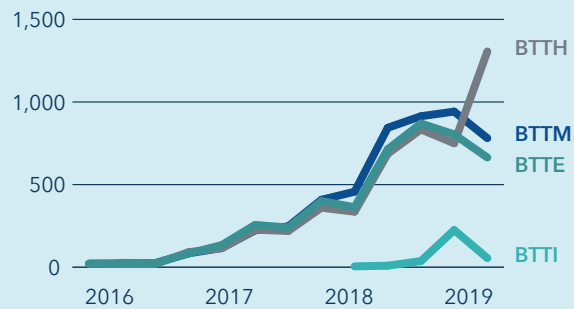
In economic terms, a recession can be identified as two successive quarters of negative growth. In the spirit of transparency, GWO has identified one module where this, at least for six months appears to be the case.

Sea Survival main courses were lower in Q3 2019 (-5.6%) and Q4 2019 (-3.9%) than the corresponding quarters in 2018. Sea Survival refreshers were also lower in Q2 2019 (-12%) and Q3 2019 (-24%) than the corresponding quarters one year earlier.

Normal service resumed in Q4 for the refresher module (+3%) and it will be interesting to see what volumes the main course experiences in the first half of 2020. Growth may be unlikely given that sea survival rose 26% in the first half of 2019.

Basic Technical Training

Modules



Training Providers 2019: 48 2018: 32

48 training centres around the world now deliver the Basic Technical Training (BTT) standard, which consists of three core modules (electrical, hydraulic, and mechanical) and an installation module which launched in 2019.

Completed BTT trainings in 2019 passed five figures for the first time (10,421), almost three times the amount recorded in 2018.

Of the individual modules, the hydraulic module rose the greatest amount, with 3577 completed in 2019, while the total cumulative number of BTT modules now completed hit 14,933 by the end of the year.

Out of Africa

A highlight of 2019 has been the development of training outside Europe. BTT has been embraced worldwide,

and South African training providers such as Saretec and Aid Renewables have demonstrated its value, completing 274 courses between them.

American standard

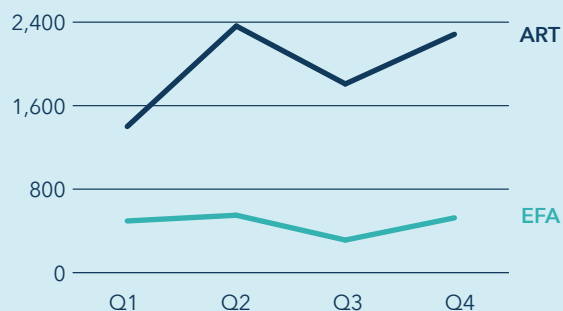
In the USA and Canada, BTT has also been taken by technicians on an increasing basis. 916 modules were completed, mostly by leading training providers SGRE in Orlando and High Plains Technology Centre in Woodward Oklahoma.

Asia set to grow

China and India have led the growth of BTT training in Asia. 878 modules were completed in those two countries plus Taiwan during 2019 and having witnessed a significant rise in the number of training provider certifications in those markets we expect to see volumes increase during 2020 and beyond.

Advanced Rescue & Enhanced First Aid Training

Modules



ART Training Providers 2019: 37
EFA Training Providers 2019: 23

Almost 10,000 Advanced Rescue Training (ART) and Enhanced First Aid (EFA) modules were completed in 2019.

ART controls the risks associated with rescue, ensuring a more efficient rescue operation from a wind turbine. The flexibility of ART has contributed to its rapid adoption. In addition, GWO member companies such as Siemens Gamesa Renewable Energy (SGRE), have merited their existing courses against GWO’s ART standard.

This means technicians with an existing SGRE Advanced Rescue Zone 1-2 certificate can attend an ART course at any training provider certified in this module.⁶

ART covers a wide range of options to support different turbines and platform types. The most popular module so far has been the ART Hub, Spinner & Inside

Blade Rescue module. Over 2000 of these were completed in 2019, while the single rescuer version saw almost as many, with 1700 modules.

Enhanced first aid

The EFA modules consist of learning objectives so participants can understand the importance of carrying out basic and enhanced first aid in a safe and sound manner, in compliance with local legislation and according to European Resuscitation Council (ERC) and American Heart Association (AHA) guidelines.

EFA and the EFA Refresher courses have been completed by 1087 and 815 participants – the refresher caters for participants who have a valid BST First Aid certificate. They can complete the BST First Aid Refresher elements, plus the EFA elements and receive the EFA refresher certificate.

⁶ See our Gap Training Guide: <https://www.globalwindsafety.org/trainingproviders/gaptraining>

GWO certificates (all modules)

	2017	2018	2019
Argentina		36	1008
CSB Argentina			251
Gestión y Servicios Eólicos (GSE)		36	551
SALVACÓN, S.C. Argentina			206
Australia	691	1776	2177
Canberra Institute of Technology	21	195	325
Fire and Safety Australia	310	850	585
Skylar Safety			275
Thomson Bridge Pty Ltd	159	472	687
Total Height Safety Pty Ltd	91	81	141
Wright Training Pty Ltd	110	178	164
Belgium	2650	3376	5063
Industrial Safety & Emergency	1340	1331	1501
RelyOn Nutec	1310	2045	3487
Skilliant cvba			75
Brazil	214	2335	5679
CWSE BRASIL COMPANY LTDA			156
HIGH SERVICE TRAINING			48
Maersk Training Brasil		116	42
PRO Altitude	214	1967	1249
QUALITA TREINAMENTOS & GESTAO			820
STORZ SERVICOS TECNICOS LTDA		252	1652
TASK ACADEMY			1712
Canada	681	443	968
New Heights Inc & Nouvelle Hauteur Inc.			49
TEAM-1 Academy Inc.	681	443	919

	2017	2018	2019
Chile	194	409	1058
GRUPO SALVACON SPA	59	48	315
Ingeteam SpA	135	222	88
PRYAS CAPACITACION LIMITADA			32
Training Team Rescue		139	623
China	666	1206	3050
ALIMAK Group Manufacturing (Shanghai)	413	236	129
Envision Energy Co.LTD			245
Fujian Offshore Wind Operation and Main.			72
Goldwind offshore wind training center		21	601
Siemens Gamesa Renewable Energy Tech.	218	834	1066
Star Wind Energy Academy (SWEA)			65
Vestas	35	115	872
Costa Rica	553	283	438
Formacion de Rescate Profesional	553	5	
Total Health Safety Environment SL - Costa		278	438
Denmark	14743	14891	17056
ALIMAK Group Denmark A/S	72	54	24
Amu-Vest	13	8	2
Global Wind Academy		60	871
International Wind Academy Lolland A/S	538	489	404
Maersk Training A/S	6342	5482	5083
Maersk Training Svendborg			12
MARTEC	35	649	447
MARTEC - Maritime and Polytechnic	598	2	
MHI Vestas			24

	2017	2018	2019
Nordjyllands Beredskab	179	97	114
RelyOn Nutec	2902	4213	4564
RESC Rednings og Sikkerhedscenter	394	226	363
Rescue Center Denmark	1334	1452	1073
Siemens Gamesa Renewable Energy A/S	2336	2147	3979
Uddannelsescenter Holstebro		12	93
Dominican Republic			163
INPROCA - SALVACÓN, S.R.L.			163
Estonia	68	251	345
Reval Marine and Offshore Training	68	251	345
Finland	333	475	532
Cresto AB	60	78	113
Wind Controller	14	91	144
Wind Controller Oy	259	306	275
France	888	1558	1901
3M ITFH training Center Paris			32
ACCSYS	89	183	249
ALPIC	40	67	65
APAVE		2	
BZEE Academy GmbH	205	237	279
CEPS	77	202	203
Cresto AB	209	214	418
Institut de formation Socotec	211	257	236
Justy Ingénierie Énergies	57	396	419
Germany	18741	21948	22146
3M - Capital Safety Training Center	2595	4288	1948

	2017	2018	2019
3M - Capital Safety - Mobile Unit		20	
Aeroconcept		96	73
Alpintec GmbH	509	686	801
BZEE Academy GmbH	34	14	
Deutsche WindGuard Offshore GmbH	1652	1494	1353
Deutsche Windtechnik Service	845	1024	784
GE Renewable Energy Learning Center		2	18
German Wind Academy GmbH	225	1011	1579
Hailo Wind Systems GmbH & Co KG	318	225	281
Heinemann Projektberatung	1857	1335	2012
ISC Training & Assembly GmbH	1630	1607	2079
Kletter-Spezial-Einheit	1		
O.S.T. Cuxhaven GmbH & Co.KG	729	1046	814
OffTEC Base GmbH & Co. KG	1019	1407	2191
PEPER energy GmbH		9	250
PSA Sicherheitstechnik GmbH & Co KG	2	13	21
PSA Zentrale		189	240
RelyOn Nutec	5078	5166	5158
RescOff GmbH	789	753	1029
Rope Access Solutions GmbH	33	21	12
Seilpartner GmbH	69	355	92
Senvion GmbH			147
SHE Solution Bergmann GmbH & Co. KG		3	58
Siemens AG	375	499	
Skylotec - Germany	498	346	452
Steady Climbing GmbH			8
Triowind GmbH	24	42	51
Windhunter Academy GmbH	459	297	695
Greece	440	484	1291
ACTIVE POINT SA		82	401
GEP	440	402	890

	2017	2018	2019
Hungary	457	378	490
Siemens Gamesa Renewable Energy	457	378	490
India	2135	3304	4948
EDUFORCE		321	788
EMSAFE FIRE SAFETY SOLUTIONS PVT			78
Karam Training & Consultancy	204	515	407
Maersk Training India Pvt. Ltd.		557	711
RS Windtech Engineers Pvt. Ltd			134
Siemens Gamesa Renewable Power			166
USHA FIRE SAFETY EQUIPMENT	1853	1380	1581
Vestas Wind Technology India Private	78	531	679
Windcare India Private Limited			404
Ireland	1078	835	1118
Access Rescue Consulting at Height Ltd	753	497	695
H&MV Engineering Ltd		28	51
Renewables Academy	325	310	337
SEFtec NMCI Offshore Ltd.			35
Italy	898	1744	1616
ASL Azienda Sicurezza Lavoro	181	174	181
Form UP S.r.l.	182	141	126
GENERAL ELECTRIC INTERNATIONAL		21	90
IVPC Service srl	174	361	295
O.T.I. SERVICE SRL	224	374	298
Padrone s.r.l.	50	355	337
PARCO DELLA VITA SRL	87	318	289
Japan	66	112	418
EOS Engineering & Service Co., Ltd.		31	261
Nippon Survival Training Center	66	81	157
Korea (Republic of)	84	303	391
Applus Korea	84	303	391
Latvia	1269	1634	2235

	2017	2018	2019
Baltic Offshore Training Centre SIA	851	894	1095
IQTC Management	345	530	374
Novikontas Maritime College	73	210	766
Lithuania	711	1670	2267
Baltic Offshore Training Centre UAB		301	809
MB Globalūs mokymai	72	970	707
NOVIKONTAS Maritime Training Centre			4
UAB Gridins Enterprise LT	639	112	
Vinda LT		287	747
Malaysia			16
MSTS Asia Sdn Bhd			16
Mexico	2732	6007	6540
Buzos Inspectores Asociados S.A. de C.V.		692	550
Camara Decimavilla Mexico SA de CV	199	768	359
GRUPO BIA - Climbex			92
Ingeteam SA de CV	770	1338	1146
Operadora Acceso Vertical de México SA	20	412	294
RENEWABLE ENERGY TRAINING MEXICO		27	241
ROCAINTEG SA DE CV			617
Salvacon SC. México	1743	2738	2818
SALVACÓN, S.C. SALVAMENTO			20
Trabajos en Alturas SA. de CV.		32	403
Netherlands	5457	7720	8343
Ascent Safety bv	435	544	460
D.H.T.C.-Den Helder Training Centre B.V.	8	61	114
De Ruyter Training & Consultancy B.V.		32	78
Delta safety training	1384	1579	1749
Emergency Control Medical Training B.V.		31	134
FMTC	1467	3133	3637
Industrieel Klimmen BV	248	309	535
Orange Access	231	116	

	2017	2018	2019		2017	2018	2019		2017	2018	2019
R3B Safety & Rescue			38	GRWind	129	111	174	EBT Health & Safety SL	62		
RelyOn Nutec	978	1082	873	Jorge Lozano Lda.	497	548	355	EROM (Energías Renovables Operación	1603	2037	2723
Safe Site Valbeveiliging	360	326	228	Mário Sequeira Barroso Unip Lda	852	674	784	ESCUELA EUROPEA DE MAQUINARIA		251	236
STC-KNRM	297	437	486	OnRope Unipessoal Lda	1413	1343	2839	Formacion de Rescate Profesional	815	1581	790
Verticaal Transport Centrum BV	49	70	11	Outside Works Lda	442	519	332	FORMA-T	2648	3254	4121
New Zealand	249	401	353	Romania	2003	2671	3156	GE Wind Energy Albacete	60	2	90
Vertical Horizonz New Zealand Limited	249	401	353	S.C. WIND POWER ENERGY S.R.L (WPE)	1840	1868	2274	GE Wind Energy Calahorra	132	17	348
Norway	97	421	555	SC SOLO SRL	163	803	881	GRAVITAT, S.L.			37
Arcos AS			8	Vestas CEU Romania SRL			1	GRUPO STIER XXI, S.L.			7
Cresto AB	56	362	227	South Africa	348	713	2367	Hicom	140	347	1012
Westcon Løfteteknikk AS	41	59	320	AID Renewables	348	337	731	Ilunion Fuego Y Conduccion, S.A.	54	39	9
Pakistan		40	286	Altitec South Africa Pty. Limited			20	Inaudita Formación y Consultoría SL	397	182	279
Albario Engineering Pvt Ltd.		40	286	High Angle cc			815	INDRA Sistemas S.A.		198	316
Philippines	255	632	428	SARETEC - South African Renewable Ener.		239	386	INGETEAM POWER TECHNOLOGY S.A.	2197	1568	1328
Consolidated Training Systems Inc.	255	632	428	Sp wind (PTY) Ltd		137	415	LEVEL INSTRUKTA s.l.			24
Poland	7284	9070	11842	Spain	18451	20425	26147	MANTROL SERVICIOS S.L - SST Grupo		105	133
Akademia Morska w Szczecinie	1929	648		ACADEMIA DE ENSEÑANZA NEWTON			15	Norcap Noerte s.l.u	19	102	98
CSW TOTEM sp. z o. o. s.k	491	492	369	ACCÉS SEGURIDAD VERTICAL S.L		2	3	PREVinsa-FORACTIVA - Madrid	637	1295	867
European Wind Academy	206	2320	3151	Adventis Solutions Camara Decimavilla	657	556	1104	PREVinsa-FORACTIVA - Mobile unit		382	349
Global Wind Consulting			15	AGUADO WIND SERVICES S.L.	245	156	793	PREVinsa-FORACTIVA - Valencia		8	
HAWK Centrum Szkoleń	47	169	226	ALIMAK Group, S.L	32		69	Seguridad Gallega Nosa Terra S.A.	477	388	522
HIGHWORK s.c.			40	ALTIUR FORMACIÓN Y PREVENCIÓN, S.L.	615	640	1269	SERVIGASA SPECIAL JOBS SL	273	48	13
Szkoła Morska w Gdyni Sp. z o.o.	392	774	1054	ASAKEN S.COOP.	174	173	326	SGS ESPAÑOLA, S.A.U.	9	244	25
VULCAN Training & Consultancy		163	1602	AUTOESCUELA NOVEL E INSTITUTO		66	350	SGS TECNOS S.A.	607	113	351
Wertykal s.c.	609	457	931	CONAPRO (COMERCIAL NAVARRA DE	1246	921	1408	SGS Tecnos, SA			123
Windhunter Academy sp. z o.o.	3610	4047	4454	Cota Limite S.L.U.			299	Siemens Gamesa Renewable Energy	132	243	15
Portugal	4130	4206	6121	CUALTIS FORMACIÓN, S.L.U. - Leganes	53	75	116	Soluciones y Desarrollos de Ingeniería		18	131
Centrajuste - CEDROS Lda.		246	545	CUALTIS FORMACIÓN, S.L.U. - Madrid	37	54		TESICNOR SL	2279	1832	2578
CIFESP, Lda		99	94	DEUTSCHE WINDTECHNIK, S.L.	26	167	257	TGM FORMACION-TRANSGRUMA	36	86	67
Codinfor - Consultoria & Formação Lda	426	452	699	E.P.E. Sociedad de Salvamento	8	10	7	Tindai Prevención y Seguridad SLL	1328	925	433
Factor Segurança Lda	371	214	299	EASTAV Global S.L.U.	391	284	255	Total Health Safety Enviroment SL		326	560

	2017	2018	2019		2017	2018	2019		2017	2018	2019
Total Health Safety Environment SL			35	OWLAQ Eğitim Danışmanlık A.Ş.			41	Offshore Painting Services Ltd	288	1152	2689
Trainek - Grupo Lider System	295	868	1263	RÜZGAR AKADEMİ		164	735	Petans	35	674	842
Training Team Rescue S.L.	485	405	283	Triowind International GmbH	73			Petrofac Facilities Management	30	1	8
TREBIKAL, S.L.		48	24	United Kingdom	28368	30950	39233	Prontoport Ltd	354	445	54
VERTICALIA SERV. DE FORMACION	13	15		360 Safety & Training			130	RelyOn Nutec	1271	1354	1045
VERTISUB SEGURIDAD SL	90			3sun Academy	1240	482	803	Renewable Strategy Ltd		21	
VESTAS EOLICA SAU			258	Access Rescue Consulting at Height Ltd	1009	1348	1871	Rig Systems Limited		29	36
Ynfiniti Engineering Services S.L. - Spain	179	394	428	Advanced Blade Repair Services			119	Safer at Work Limited	95	169	163
Sweden	1986	2294	2618	AIS Training	5310	6057	7650	Safety Technology Ltd	191	80	
Aptum Fallskydd AB	92	48	59	Ainscough Crane Hire Ltd.	352	211	274	Safety Technology Ltd - UK - Raglan	353	567	370
C2 Vertical Safety AB	257	193	824	Altitec Academy			35	Siemens Gamesa Renewable Energy	492	780	1832
Cresto AB	383	420	581	Arco Professional Safety Services	29	29	12	Taskmasters (UK) Limited	12	224	630
Klätterteknik AB	16	80	167	Ayrshire College			18	The heightec Group Limited	1929	2022	1973
NUAB		76	111	Belay Rope Access Ltd.	950	949	1072	The TTE Technical Training Group		4	34
Rope Access Sverige AB	795	909	361	Boston Energy Limited			65	Trauma and Resuscitation Services Ltd			351
Skylootec - Sweden	330	278	398	Capital Safety Group (Northern Europe)	803	800	728	Windhoist Ltd.	1725	1740	1917
V.Pro AB	113	290	117	Checkmate Lifting & Safety Ltd	592	445	457	United States of America	4762	3920	7035
Taiwan - Province of China		18	572	Clyde Training Solutions		236	500	ALIMAK Group USA Inc.	48	48	53
Taiwan International Windpower Training		18	572	Complete Training Solutions	3805	3763	4524	ENSA North America Inc.	1084	357	984
Thailand		341	985	CWind Training	1090	760	960	High Plains Technology Center	682	851	2775
3M Thailand Limited			120	Fleetwood Offshore Survival Centre	626	452	793	Safety Technology - USA	115	689	327
Dacon Inspection Technologies Company		90	212	HFR Solutions CIC	344	451	344	Safety Technology USA		69	894
Pattaya International Safety Training Center		251	653	HTL GROUP LTD	6	15	37	Safety Technology USA			6
Turkey	2102	3976	3980	HUMBERSIDE OFFSHORE TRAINING	288	606	888	Siemens Orlando Wind Service Training	2833	1906	1996
AVRASYA RÜZGAR TEKNOLOJİ	334	344	355	Maersk Training UK Limited	3822	2973	1414	Uruguay	662	1466	795
Ekstrem İşler	123	462	858	Maersk Training UK Ltd	981	1795	3585	Bonelco S.A.	650	909	376
ERA İple Erişim Eğitim Danışmanlık	226	352	307	Martin Castle Ltd			167	VG formación	12	305	234
INTERCON			312	Mistras Group Ltd	92	89	91	WEIR YES URUGUAY - Ynfiniti		252	185
Kaya Training	136	126	4	MRS TRAINING AND RESCUE			2				
Mira Endüstriyel Eğitim Danışmanlık	1210	2358	773	MRS Training and Rescue Ltd	254	226	263				
More Enerji San ve Tic Ltd Şti		170	595	NRS Training Services Ltd			486				

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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