



GLOBAL WIND
ORGANISATION

Half year report

January 1 - June 30 2019



Key factors driving growth

- 35 new training providers certified in 20 different countries across five continents
- Significant increase in activity across Asia, Latin America, North America
- Rapid adoption of Advanced Rescue Training (ART) and Enhanced First Aid Training (EFA)
- Triple the volume of Basic Technical Training (BTT)

Contents

Page 4	Key Findings
Page 5	Basic Safety Training
Page 6	Advanced Rescue Training & Enhanced First Aid Training
Page 7	Basic Technical Training
Page 8	Top 10 Training Providers
Page 10	GWO Worldwide
Page 12	Data Tables



Annual review

Jakob Lau Holst - CEO, Global Wind Organisation

Welcome to our latest half year report, detailing activities from across the worldwide network of GWO training.

I am pleased to report that GWO training providers experienced their busiest ever period during the first half of 2019.

More training providers are delivering more courses for more people, contributing to our members' mission of creating an injury-free working environment in wind energy.

This report collects together key facts and figures from records uploaded into the Wind Industry Database (WINDA), which has been in operation since October 2016.

GWO standardised training now covers 16 different modules of safety and technical safety, delivered in over 40 countries around the world, by a total of 324 training providers. More than 80,000 people had a live GWO training record by the end of June 2019.

This 12% rise brings the total number trained according to GWO standards to 83,980¹.

As ever, we welcome your feedback and look forward to working with you to help create a safer and more productive workforce in wind.

Workers with a valid GWO training record



1) Merit records have been excluded from all tables, except for the overall figure representing the number of WINDA IDs with a valid record (83,980).

Key findings

In the first six months of 2019, the total number of completed GWO training modules rose 26% compared to the corresponding half year period in 2018.

As GWO members develop more standards, more training is completed, resulting this year in a total of 107,394 records uploaded to WINDA.

Delegates continue to take more courses during the first half of the year than they do in the second.

Forecasts for July-December 2019 suggest between 82,000 and 88,000 more records will be uploaded to WINDA, in keeping with previous years when the second half was between 18-24% down.

Number of certificates uploaded (all modules excl Merit)

	Total	% vs previous half year	% vs corresponding half year
 H1 2017	72,009		
 H2 2017	54,069	-24%	
 H1 2018	84,702	+56%	+17%
 H2 2018	69,058	-18%	+27%
 H1 2019	107,394	+55%	+26%

Number of people with a valid GWO Record (incl Merit)

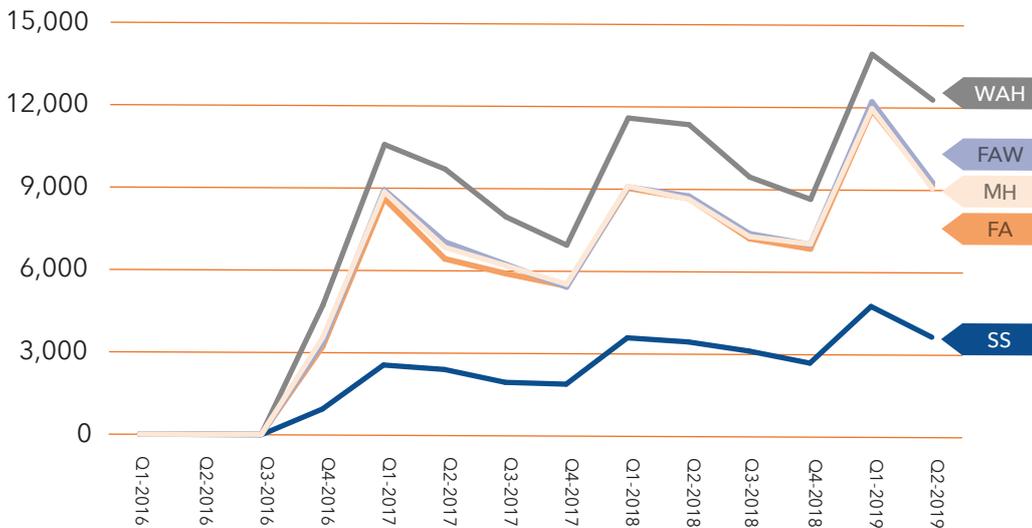
	Total	Growth (actual)
 H1 2017	28,911	
 H2 2017	44,394	+15,483
 H1 2018	63,057	+18,663
 H2 2018	74,412	+11,355
 H1 2019	83,980	+9,568

Basic Safety Training

The Basic Safety Training Standard consists of five modules, providing a minimum standard of safety competence for workers in the wind industry.

98,312 BST records were uploaded to WINDA in the first half of 2019. The types of modules and the proportions of people taking them remain broadly the same, with Working at Height the most common, Fire Awareness, Manual Handling and First Aid roughly equal in number and Sea Survival the least common.

Records



More people refreshing skills

Almost 40% of all BST records were refreshers during the first half of 2019. This is almost 10% higher than the first half of 2017 and a 4% increase on the same period last year.

	Main courses	Refresher courses	Ratio
H1 2017	50,877	21,132	71:29
H2 2017	38,404	15,142	72:28
H1 2018	54,780	28,513	66:34
H2 2018	46,056	20,685	69:31
H1 2019	61,411	36,901	62:38

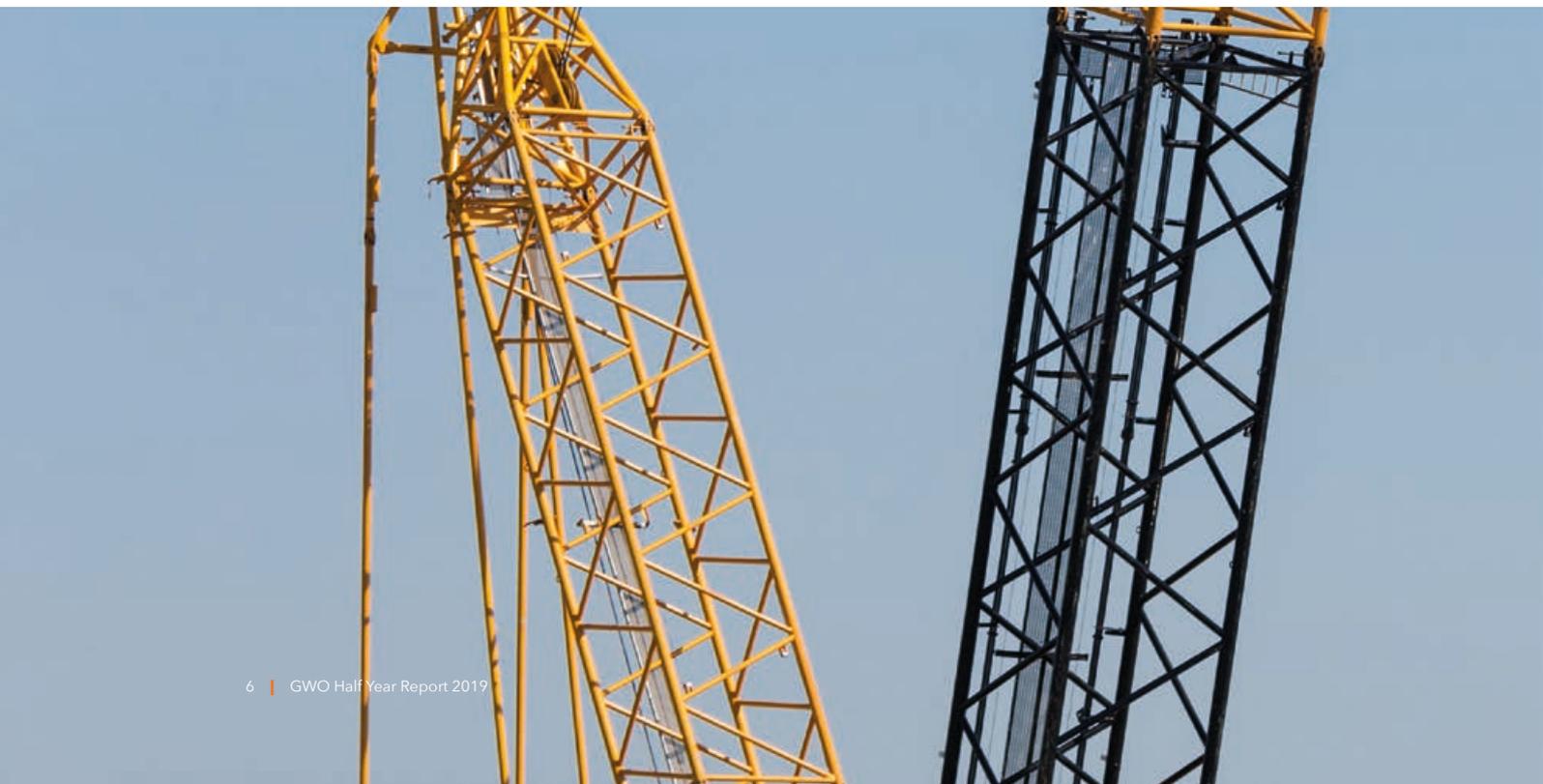
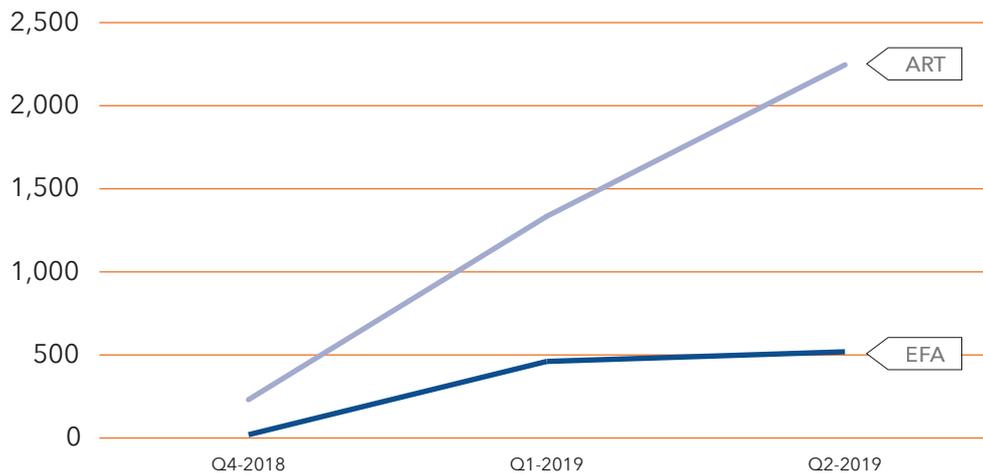
Advanced Rescue Training & Enhanced First Aid

Launched in October 2018 to support the needs of employers operating in more remote areas, Advanced Rescue Training (ART) and Enhanced First Aid (EFA) have been widely adopted across the network.

Thirty-three training providers have certified to deliver ART and EFA standards and as the numbers show, the training has been extremely popular.

Excluding merit records, almost 5000 modules have been trained in total, with ART alone seeing 3882 modules completed in the first half of 2019.

Records

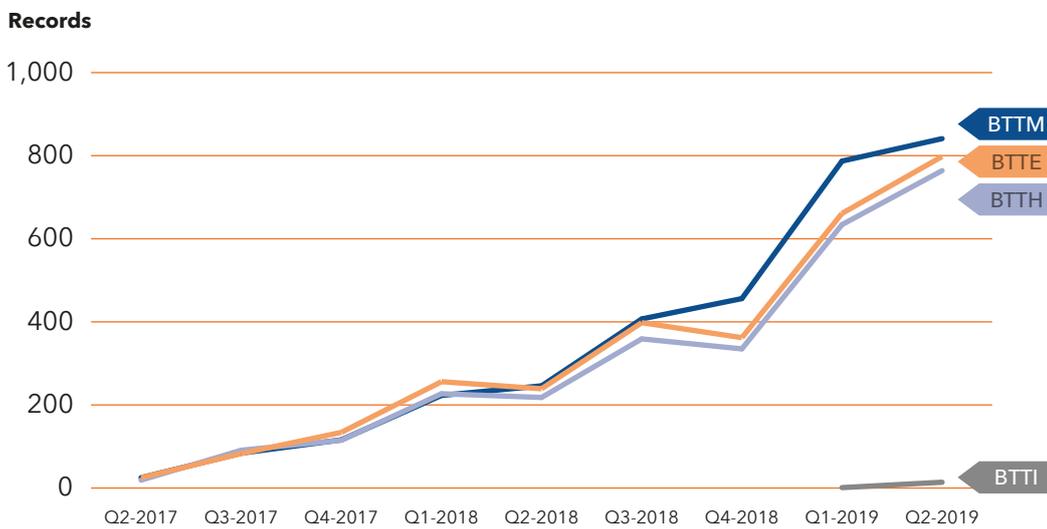


Basic Technical Training

The BTT standard consists of three main modules, plus a fourth installation module which launched in early 2019.

With no refresher required, the numbers can be analysed cumulatively. Every module taken represents a newly qualified individual supporting the industry's mission to create an injury free working environment.

A total of 9045 BTT modules have been completed since the standard first launched. Most delegates complete the trio of electrical, mechanical and hydraulic modules suggesting approximately 3000 people now have at least three BTT certificates.



Top 10 GWO Training Providers

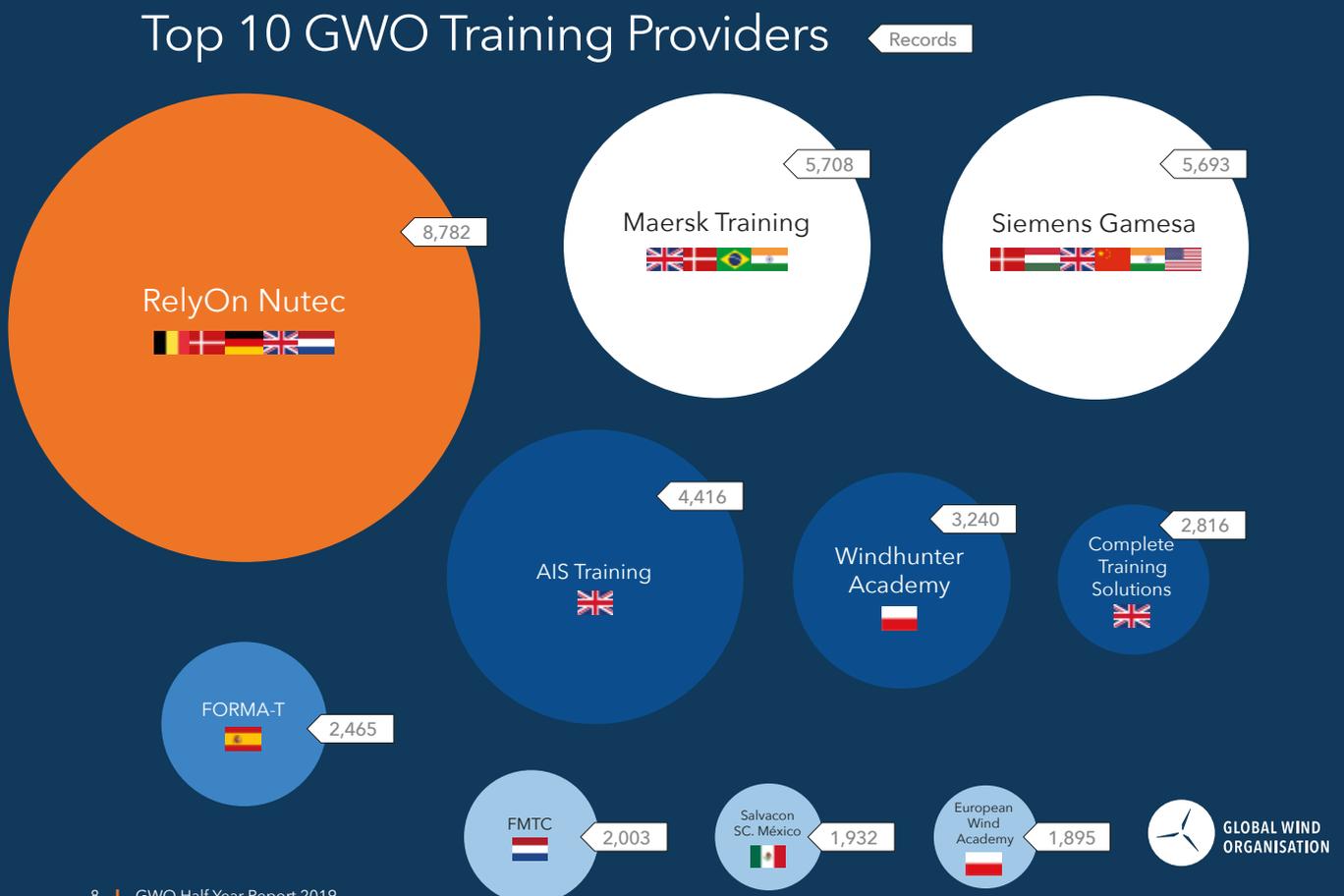
Just under 40% of all modules were delivered by the top ten GWO training providers during the first half of 2019. The graphic below represents the total number of modules delivered on a per company basis. The tables on page 9 are separated into individual GWO sites.

Companies frequently operate from multiple sites, and 38,950 modules were completed across the top 10's training centres. Most activity is from the BST portfolio although there are notable exceptions.

Siemens Gamesa's position in third includes 1,170 Advanced Rescue Training (ART) and Enhanced First Aid (EFA) modules. RelyOnNutec also moved quickly, providing a combined total of 979 ART and EFA Modules.

Basic Technical Training grew rapidly during the first half of 2019 as Maersk Training led the field with over 600 modules from two sites in the UK and Denmark.

There were also some new faces as companies including European Wind Academy in Poland and Salvacon in Mexico joined the overall top 10.

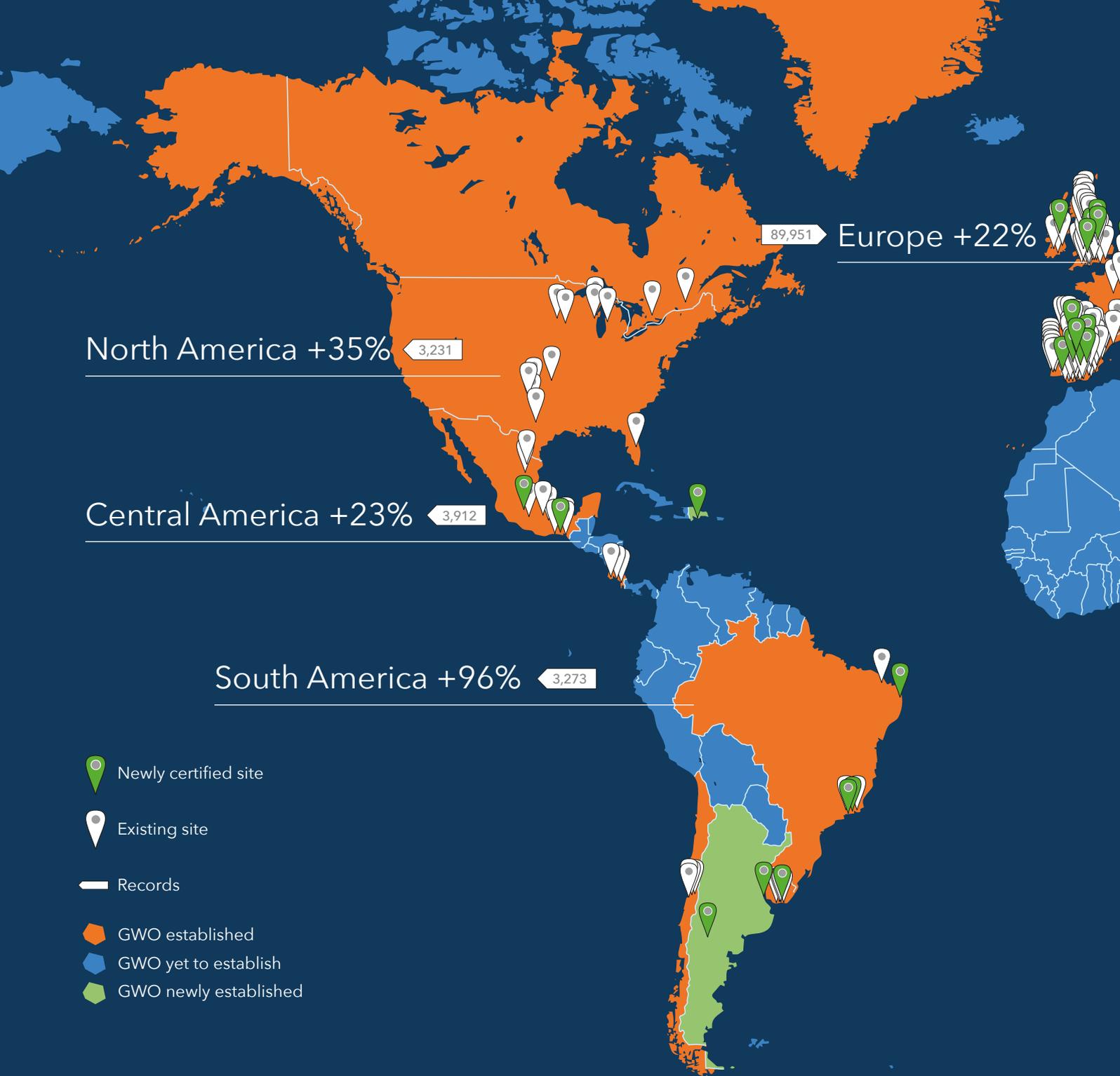


H1 2019 BST and BSTR Only

1	AIS Training		3,972
2	RelyOn Nutec		2,759
3	Complete Training Solutions		2,577
4	Maersk Training A/S		2,306
5	Windhunter Academy		2,258
6	FORMAT		2,224
7	RelyOn Nutec		2,074
8	FMTC		2,003
9	Salvacon SC. México		1,932
10	European Wind Academy		1,693

H1 2019 BTT Only

1	Maersk Training A/S		378
2	AIS Training		360
3	Siemens Gamesa Renewable Energy A/S		275
4	Siemens Orlando Wind Service Training Center		252
5	RelyOn Nutec		248
6	OnRope Unipessoal Lda		245
7	FORMAT		241
8	Maersk Training UK Limited		240
9	Windhoist Ltd.		237
10	Windhunter Academy		221



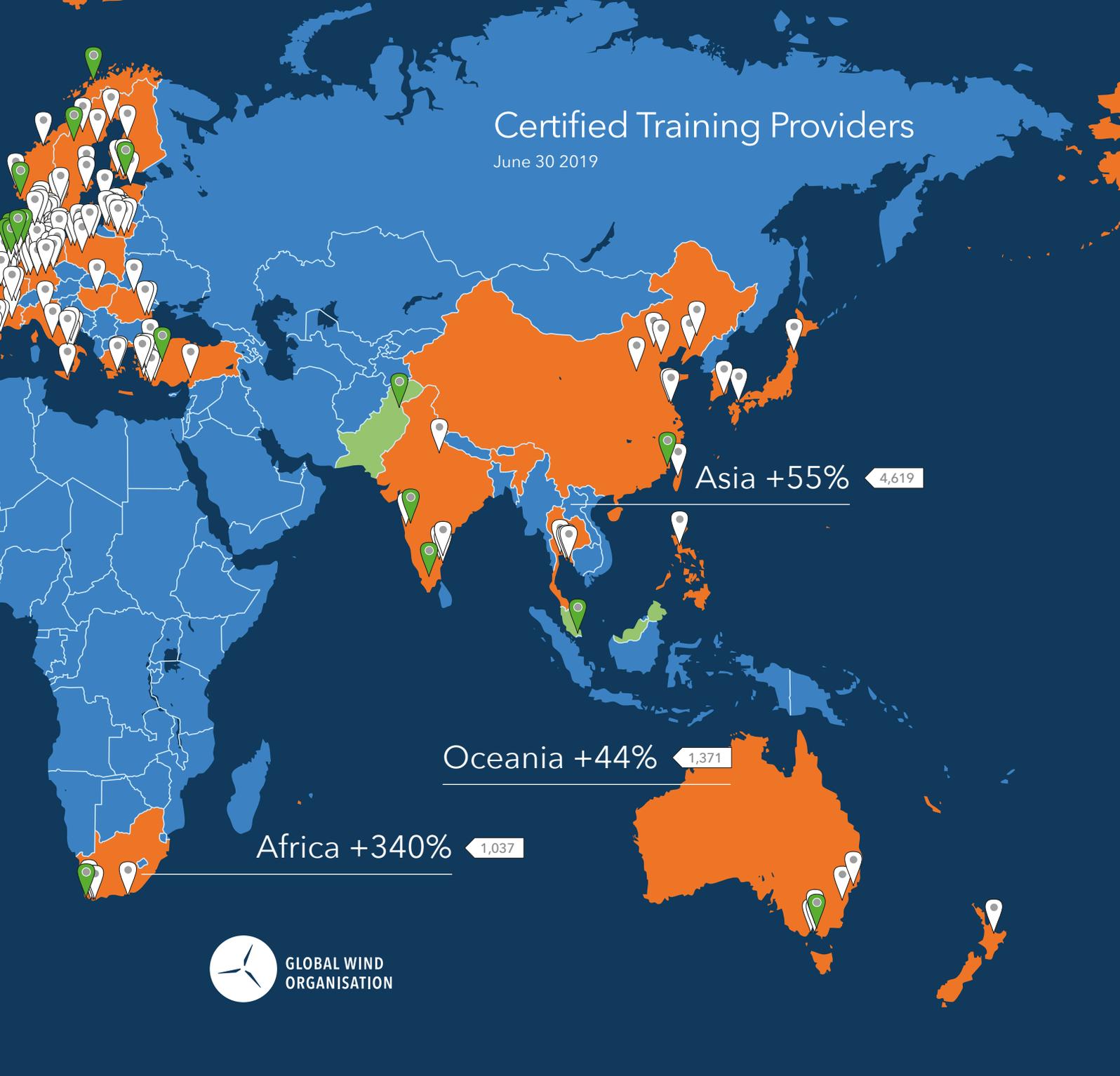
Growth across every region

Thirty-five new training providers were certified during the first half of 2019. Sixteen of those were in countries outside Europe and the contribution made by companies in Asia/Pacific, Latin America, North America and Africa is increasing.

Driven by Brazil, Chile, Uruguay and Argentina, GWO training is now available at 16 locations across South America, with training providers completing almost double the amount of courses they provided in the previous half year.

Certified Training Providers

June 30 2019



In Asia; training providers located in China, India, Taiwan and Thailand have also grown quickly, completing an additional 55% against last year. In North America, training volumes rose by 35% and there are now just short of 3,000 people of American or Canadian citizenship with a valid record in WINDA (including merit).

With six training providers certified to date, the South African market is a beacon for the continent and just over 1,000 courses were completed in the first half of 2019 there.

Data Tables: GWO certificates (all modules)

	2017		2018		2019
	Q1/Q2	Q3/Q4	Q1/Q2	Q3/Q4	Q1/Q2
Argentina			36		444
CSB Argentina					84
Gestión y Servicios Eólicos (GSE)			36		202
Salvacón, S.C. Argentina					158
Australia	305	386	752	1024	1255
Canberra Institute of Technology		21	70	125	195
Fire and Safety Australia	168	142	316	534	356
Skylar Safety					148
Thomson Bridge Pty Ltd	84	75	175	297	332
Total Height Safety Pty Ltd	53	38	37	44	88
Wright Training Pty Ltd		110	154	24	136
Belgium	1281	1368	2163	1213	2716
Industrial Safety & Emergency	732	608	946	385	825
RelyOn Nutec	549	760	1217	828	1855
Skilliant cvba					36
Brazil	10	204	846	1489	1894
Maersk Training Brasil				116	42
PRO Altitude	10	204	846	1121	524
Storz Servicios Tecnicos LTDA				252	960
Task Academy - Claudia Maria					368
Canada	422	259	285	158	317
New Heights Inc & Nouvelle					28
TEAM-1 Academy Inc.	422	259	285	158	289
Chile	81	113	123	283	478
Grupo salvacon SPA	4	55	40	8	85
Ingeteam SpA	77	58	82	140	64
Pryas capacitacion limitada					16
Training Team Rescue			1	135	313
China	169	497	621	585	1224
ALIMAK Group Manufacturing	169	244	128	108	69
Envision Energy (Jiangsu) Co.LTD					139
Fujian Offshore Wind Operation					8
Goldwind offshore wind training				21	206
SGRE		218	465	369	348
Vestas		35	28	87	454
Costa Rica	361	192	127	156	298
Formacion de Rescate Profesional	361	192	5		
Total Health Safety Enviroment SL			122	156	298
Denmark	8903	5853	8383	6428	9608
ALIMAK Group Denmark A/S	69	3	24	30	19
Amu-Vest	9	4	7	1	
Global Wind Academy				60	418

	2017		2018		2019
	Q1/Q2	Q3/Q4	Q1/Q2	Q3/Q4	Q1/Q2
International Wind Academy	338	206	332	157	212
Maersk Training A/S	3984	2365	3006	2446	2648
Martec		35	422	219	230
Martec	344	254		2	
Nordjyllands Beredskab	110	69	86	11	50
RelyOn Nutec	1470	1432	2540	1673	2773
RESC	231	163	125	101	220
Rescue Center Denmark	851	483	847	592	676
GSGRE	1497	839	994	1124	2335
Uddannelsescenter Holstebro				12	27
Dominican Republic					87
Inproca - Salvacón, S.R.L.					87
Estonia	4	64	120	125	164
Reval Marine and Offshore	4	64	120	125	164
Finland	238	95	283	190	358
Cresto AB	55	5	61	17	73
Wind Controller		14	41	50	106
Wind Controller Oy	183	76	181	123	179
France	457	427	785	757	1080
ACCSYS	68	21	96	84	210
ALPIC	28	12	39	28	48
APAVE			2		
BZEE Academy	133	72	115	121	149
CEPS	6	70	148	54	112
Cresto AB	159	50	110	104	251
Institut de formation Socotec	63	148	178	75	139
Justy Ingénierie Énergies		54	97	291	171
Germany	11100	7634	13737	8146	13547
3M - Capital Safety Training	1291	1304	3253	1035	1441
3M - Capital Safety - Mobile Unit			20		
Aeroconcept			84	12	57
Alpintec	277	232	467	212	424
BZEE Academy	24	10	12	2	
Deutsche WindGuard Offshore	1077	575	845	649	818
Deutsche Windtechnik	430	415	763	261	446
GE Wind Education Center			2		8
German Wind Academy		225	672	339	1010
Hailo Wind Systems	216	102	136	77	225
Heinemann Projektberatung	1303	554	729	605	1390
ISC Training & Assembly	1058	572	1030	576	1257
Kletter-Spezial-Einheit	1				
O.S.T. Cuxhaven	357	372	641	405	577

	2017		2018		2019
	Q1/Q2	Q3/Q4	Q1/Q2	Q3/Q4	Q1/Q2
OffTEC Base GmbH & Co. KG	710	309	596	809	1262
PEPER energy GmbH				9	128
PSA Sicherheitstechnik GmbH	2			13	9
PSA Zentrale			108	81	143
RelyOn Nutec	2830	2241	2893	2249	2908
RescOff GmbH	536	253	477	266	578
Rope Access Solutions GmbH	16	17	16	5	7
Seilpartner GmbH	43	26	322	33	69
SHE Solution Bergmann				3	38
Siemens AG	174	201	376	116	
Skylotec - Germany	368	130	186	160	299
Triowind GmbH	24		15	26	36
Windhunter Academy GmbH	363	96	94	203	417
Greece	332	108	253	231	655
Active Point SA			29	53	97
GEP	332	108	224	178	558
Hungary	335	122	149	229	290
SGRE	335	122	149	229	290
India	342	1752	1664	1619	2188
Eduforce			112	209	467
Karam Training & Consultancy	26	142	135	368	56
Maersk Training India Pvt. Ltd.			236	313	228
RS Windtech Engineers Pvt. Ltd					44
SGRE					74
Technical and Safety Training	1	72	311	219	343
Usha Fire Safety	315	1538	870	510	881
Windcare India Private Limited					95
Ireland	654	424	488	338	543
Access Rescue Consulting	497	256	288	200	285
H&MV Engineering Ltd			5	23	26
Renewables Academy	157	168	195	115	212
SEFtec NMCI Offshore Ltd.					20
Italy	402	496	975	769	846
ASL Azienda Sicurezza Lavoro	115	66	144	30	100
Form UP S.r.l.	82	100	48	93	73
General Electric International			19	2	5
IVPC Service srl	60	114	164	197	133
O.T.I. SERVICE SRL	103	121	235	139	188
Padrone s.r.l.	15	35	159	196	160
Parco della Vita SRL	27	60	206	112	187
Japan	64	2	42	70	217
EOS Engineering & Service				31	145

	2017		2018		2019
	Q1/Q2	Q3/Q4	Q1/Q2	Q3/Q4	Q1/Q2
Nippon Survival Training Center	64	2	42	39	72
Korea (Republic of)		84	181	120	221
Applus Korea		84	181	120	221
Latvia	687	587	926	702	1189
Baltic Offshore Training Centre	575	281	558	336	670
IQTC Management	112	233	224	306	290
Novikontas Maritime College		73	144	60	229
Lithuania	372	339	941	726	1459
Baltic Offshore Training Centre			44	257	442
MB Globalūs mokymai	1	71	669	298	500
UAB Gridins Enterprise LT	371	268	112		
Vinda LT			116	171	517
Malaysia					5
MSTS Asia Sdn Bhd					5
Mexico	1235	1479	3044	2815	3539
Buzos Inspectores Asociados			307	385	363
Camara Decimavilla Mexico	15	184	437	331	231
GRUPO BIA - Climbox					20
Ingeteam SA de CV	276	494	808	530	815
Operadora Acceso Vertical		20	211	201	134
Renewable Energy Training Mex.				27	67
Rocainteg SA de CV					120
Salvacon SC. México	944	781	1281	1309	1548
Trabajos en Alturas SA. de CV.				32	241
Netherlands	3111	2344	4219	3479	4761
Ascent Safety bv	188	247	367	176	209
D.H.T.C.-Den Helder Training		8	34	27	99
De Ruyter Training & Consultancy				32	55
Delta safety training	904	480	849	729	1090
Emergency Control Medical				31	64
FMTC	762	705	1601	1513	2015
Industrieel Klimmen BV	152	96	129	180	231
Orange Access	164	67	99	17	
R3B Safety & Rescue					35
RelyOn Nutec	586	391	604	477	520
Safe Site Valbeveiliging	185	174	215	111	167
STC-KNRM	140	157	251	186	276
Verticaal Transport Centrum BV	30	19	70		
New Zealand	51	198	162	239	132
Vertical Horizonz New Zealand	51	198	162	239	132
Norway		97	269	152	376
Cresto AB		56	247	115	167

Data Tables: GWO certificates (all modules)

	2017		2018		2019
	Q1/Q2	Q3/Q4	Q1/Q2	Q3/Q4	Q1/Q2
Westcon Løfteteknikk AS		41	22	37	209
Pakistan			20		135
Albario Engineering Pvt Ltd.			20		135
Philippines	42	213	386	246	165
Consolidated Training Systems	42	213	386	246	165
Poland	4435	2847	5059	4004	7356
Akademia Morska w Szczecinie	1480	449	512	136	
CSW TOTEM sp. z o. o. s.k	382	109	456	36	247
European Wind Academy		206	1342	978	1873
HAWK Centrum Szkoleń	31	16	122	47	191
Szkoła Morska w Gdyni Sp. z o.o.	229	163	371	403	762
Vulcan Training Center				163	908
Wertykal s.c.	289	320	281	174	576
Windhunter Academy sp. z o.o.	2024	1584	1975	2067	2799
Portugal	2245	1885	2228	1967	3271
Centrajuste - CEDROS Lda.			50	186	325
CIFESP, Lda			49	50	51
Codinfor - Consultoria	118	308	226	226	346
Factor Segurança Lda	300	71	114	100	243
GRWind	88	41	108	3	157
Jorge Lozano Lda.	315	182	342	206	180
Mário Sequeira Barroso Unip Lda	432	420	475	199	417
OnRope Unipessoal Lda	775	638	686	656	1326
Outside Works Lda	217	225	178	341	226
Romania	960	1038	1346	1322	1620
S.C. Wind Power Energy S.R.L (WPE)	960	875	964	904	1127
SC SOLO SRL		163	382	418	493
South Africa	165	183	236	477	1037
AID Renewables	165	183	150	187	368
High Angle cc					346
Saretec			42	197	85
Sp wind (PTY) Ltd			44	93	238
Spain	11481	6967	11140	9247	15120
Accés Seguridad Vertical S.L				2	3
Adventis Solutions	409	248	320	222	609
Aguado Wind Services S.L.	134	111	104	52	497
ALIMAK Group, S.L	32				42
Altior Formación y Prevención, S.L.	497	118	311	329	554
Asaken S.Coop.	24	150	96	77	182
Autoescuela Novel e Instituto				66	229
Conapro	886	360	555	366	920

	2017		2018		2019
	Q1/Q2	Q3/Q4	Q1/Q2	Q3/Q4	Q1/Q2
Cota Limite S.L.U.					125
Cualtis Formación, Leganes	44	9	46	29	88
Cualtis Formación, Madrid		37	54		
Deutsche Windtechnik, s.L.		23	28	139	205
E.P.E. Sociedad de Salvamento		8	10		7
EASTAV Global S.L.U.	230	161	176	108	129
EBT Health & Safety SL	62				
EROM	832	771	1378	659	1231
Escuela Europea de Maquinaria				251	160
Formacion de Rescate Profesional	664	151	882	698	574
FORMA-T	1712	936	1645	1599	2450
GE Wind Energy Albacete	2	58		2	74
GE Wind Energy Calahorra	26	106	1	16	156
GRAVITAT, S.L.					16
Hicom	116	24	181	166	666
Ilunion Fuego Y Conduccion, S.A.	34	20	38	1	3
Inaudita Formación y Consultoría	305	92	168	14	206
INDRA Sistemas S.A.			52	146	201
Ingeteam Power Technology S.A.	1406	791	761	807	750
Mantrol Servicios S.L - SST Grupo				105	66
Norcap Noerte s.l.u		19	51	51	98
Previnsa-Foractiva - Madrid	305	332	731	561	411
Previnsa-Foractiva - Mobile unit			192	185	220
Previnsa-Foractiva - Valencia			8		
Seguridad Gallega Nosa Terra	330	147	231	157	293
Servigasa Special Jobs SL	221	52	48		13
SGS Española S.A.U	319	288	69	44	227
SGS ESPAÑOLA, S.A.U.		9	159	83	25
SGS Tecnos, SA					76
SGRE	85	47	146	97	15
Ingeniería y Servicios, S.L.				18	91
Tesicnor SL	1547	732	1005	827	1585
TGM Formacion-Transgruma	5	31	86		63
Tindai Prevención y Seguridad	859	469	584	341	271
Total Health Safety Environment SL			233	93	291
Total Health Safety Environment					29
Trainek - Grupo Lider System	93	202	385	480	723
Training Team Rescue S.L.	171	314	217	188	130
Trebikal, S.L.			28	20	24
Verticalia Serv. de Formacion	10	3	12	3	
Vertisub Seguridad sl		90			

	2017		2018		2019
	Q1/Q2	Q3/Q4	Q1/Q2	Q3/Q4	Q1/Q2
Vestas Eolica Sau					142
Ynfinity Engineering Services	121	58	149	245	250
Sweden	1183	802	1101	1171	1519
Aptum Fallskydd AB	39	52	8	40	31
C2 Vertical Safety AB	209	48	45	136	394
Cresto AB	150	233	242	173	408
Klätterteknik AB	16		80		52
NUAB			43	28	72
Rope Access Sverige AB	511	284	512	397	218
Skylotec - Sweden	201	129	126	152	267
V.Pro AB	57	56	125	165	77
Taiwan, Province of China				18	69
Taiwan International Windpower				18	69
Thailand			65	275	545
3M Thailand Limited					40
Dacon Inspection Technologies			45	45	101
Pattaya International Safety			20	230	404
Turkey	829	1273	2464	1492	1754
Avrasya Rüzgar Teknoloji	84	250	172	172	181
Ekstrem İşler	22	101	220	242	442
ERA	8	218	213	139	150
Intercon					126
Kaya Training	68	68	88	38	4
Mira Endüstriyel	606	604	1725	624	386
More Enerji San ve Tic Ltd Şti			46	113	251
OWLAQ Eğitim Danışmanlık A.Ş.					25
Rüzgar Akademî				164	189
Triowind International GmbH	41	32			
United Kingdom	16986	11394	16406	14462	22136
360 Safety & Training					56
3sun Academy	855	385	240	242	451
Access Rescue Consulting	602	407	654	692	887
AIS Training	3149	2161	3159	2876	4392
Ainscough Crane Hire Ltd.	214	138	102	106	227
Arco Professional Safety Services	17	12	18	11	6
Belay Rope Access Ltd.	503	447	466	482	663
Boston Energy Limited					7
Capital Safety Group	459	344	534	266	337
Checkmate Lifting & Safety Ltd	435	157	167	272	296
Clyde Training Solutions			6	226	357
Complete Training Solutions	2272	1533	2029	1717	2766

	2017		2018		2019
	Q1/Q2	Q3/Q4	Q1/Q2	Q3/Q4	Q1/Q2
CWind Training	536	554	407	353	552
Fleetwood Offshore Survival	402	224	275	177	466
HFR Solutions CIC	211	133	249	202	214
HTL GROUP LTD		7	9	6	22
Humberside Offshore Training	205	83	286	320	592
Maersk Training	547	432	884	907	1443
Maersk Training UK Limited	2179	1656	1960	1013	1230
Martin Castle Ltd					96
Mistras Group Ltd	72	20	51	38	54
MRS Training and Rescue Ltd	169	85	166	59	193
NRS Training Services Ltd					164
Offshore Painting Services Ltd	98	190	659	493	1630
Petans		35	292	382	450
Petrofac Facilities Management	15	15	1		2
Prontoport Ltd	260	94	293	152	54
RelyOn Nutec	895	376	760	593	655
Renewable Strategy Ltd			9	12	
Rig Systems Limited				29	31
Safer at Work Limited	55	40	120	49	92
Safety Technology Ltd	101	90	80		
Safety Technology Ltd - UK	202	151	321	229	218
SGRE	450	42	279	501	1087
Taskmasters (UK) Limited		12	79	144	285
Test Training Provider				1	1
The heightec Group Limited	1114	815	1070	952	989
The TTE Technical Training Group				4	12
TRS					140
Windhoist Ltd.	969	756	781	956	1019
United States of America	2666	2096	2106	1758	2929
ALIMAK Group USA Inc.	16	32		48	17
ENSA North America Inc.	559	525	215	142	381
High Plains Technology Center	394	288	432	405	1080
Safety Technology - USA	66	49	377	309	40
Safety Technology USA				69	419
SGRE	1631	1202	1082	785	992
Uruguay	266	396	646	820	457
Bonelco S.A.	266	384	353	556	253
VG formación		12	203	102	130
Weir Yes Uruguay - Ynfinity			90	162	74

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

Info@globalwindsafety.org

www.globalwindsafety.org

www.linkedin.com/company/global-wind-organisation

Photos: Global Wind Organisation and iStockphoto



**GLOBAL WIND
ORGANISATION**