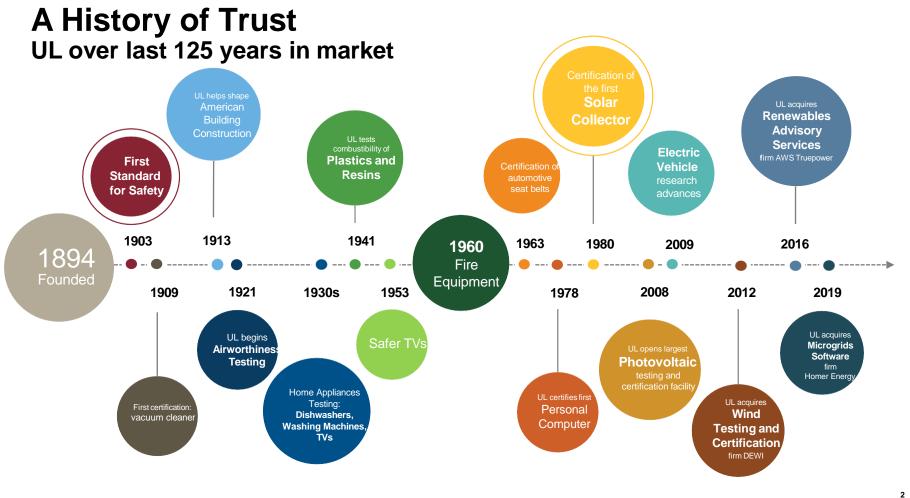
UL CERTIFICATE





CERTIFICATION

"procedure by which a third party gives written assurance that a product, process or service conforms to specified requirements, also known as conformity assessment"

Why to certify?



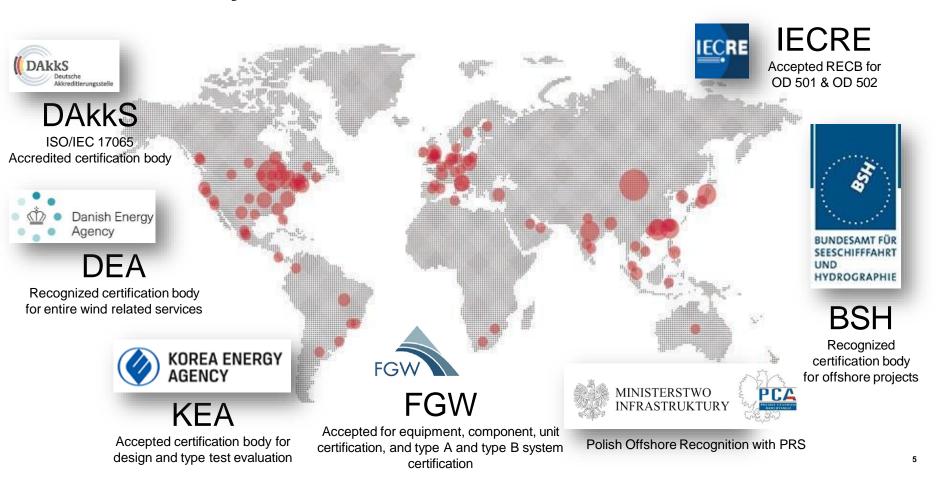
Avoid biases through independent third party

Ensure trust in the technology (safety and structural integrity) through conformity assessments

Risk mitigation for project planning and investment

Quality assurance, commercialization of the product

How we certify?



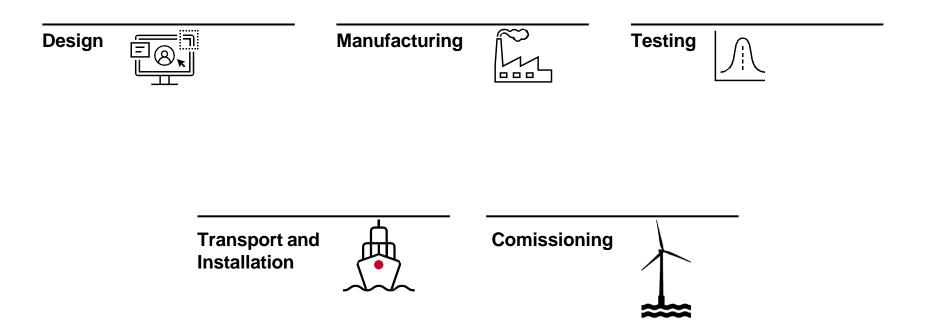
Committee Participation

- BSH Arbeitskreis Klarstellung
- BWE (Weiterbetrieb)
- DKE AK383.0.5 (IEC 61400-5, -23)
- DKE TBKON / REMC
- FGW AG TR4 EZA-Regler Modelle
- FGW AK TR4
- FGW AK TR8
- FGW AG TR4 EZA-Regler Modelle
- FGW FAEE
- IEA Task 52
- IEC TC 88 MT01
- IEC TC 88, IEC61400-50-4
- IEC TC88 PT5 (IEC 61400-5)

- IECRE OD501-1
- IECRE OD501-2
- IECRE OD501-4
- IECRE WG 006
- IECRE WG 008
- IECRE WG 011
- IECRE TF 009
- IECRE WG 501
- IECRE WG010 GCC
- NTS GTSub
- PTPiREE PL GCC
- WAB Arbeitskreis Gründungsstrukturen



Key aspects within Certification



Core Certification Services

Component

Certification of a wind turbine component like gearbox, blades, floaters etc. as stand-alone as per design assumptions and specific standards

Type

Certification of a type of wind turbines as per design assumptions and specific standards (Tower / Foundation optional)

Project/Wind farm

Certification of complete wind farm including site evaluations, integrated load evaluation, and foundation.



Input - Custome

Proof of Concept

Objective is to ensure that the design is conceptually acceptable and feasible. Scaled model or component test can be a part during conceptual evaluation. Aim is to mitigate the risk of non-compliance development of the product in **R&D** which can lead to rejection for the market. This can be supported further via "Certification accompayining Services".

Process Certification

As a part of the design evaluation through inspection (remote or physical) at the designer's office. The component design process shall be demonstrated by the customer, for all design phases starting from the used inputs and ending at the finalized component design office. Aim is risk mitigation of development of similar products certified trough the same process "Scalability"

