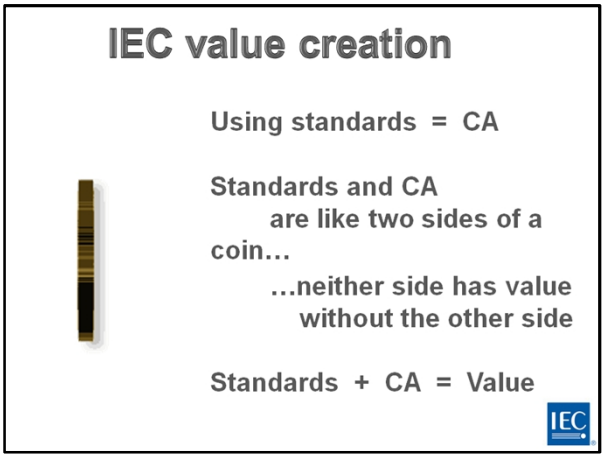
IEC Conformity Assessment update

David Hanlon
IEC Secretary of the Conformity Assessment Board

UNECE WP 6
2nd December 2016
Geneva

INTERNATIONAL ELECTROTECHNICAL COMMISSION



The IEC recognizes the value of standards, but it also recognizes that, in most cases, using standards equates to doing conformity assessment.

Whether it's a manufacturer or an end user or an independent 3rd party, when they use a standard to check a product or a service, they are all doing conformity assessment.

In this way, standards and conformity assessment are like two sides of a coin…
neither side has value without the other side.

Only together do standards and conformity assessment create value.

IEC develops International standards, but also manages global conformity assessment schemes.

The IEC has four global conformity assessment systems.

Almost a million certificates have been issued through the IEC CA Systems,
with more than 80’000 certificates currently being issued each year.

And there are more than 800 commercial testing laboratories and certification bodies, from around the world, that are members of the IEC CA Systems.

The IEC CA Systems are, the
IECEE – which is for products and equipment for homes, offices, medical, manufacturing, public spaces, Smart Grid, EVs and so on.

It's well known certification scheme is called the CB-scheme.

The IECEE is also currently active in developing global cybersecurity services.

IEC Global CA Systems

Global Conformity Assessment Systems

→ **IECEx**

Certification of
Ex equipment since 1996
Ex services since 2007
Personal competency 2011

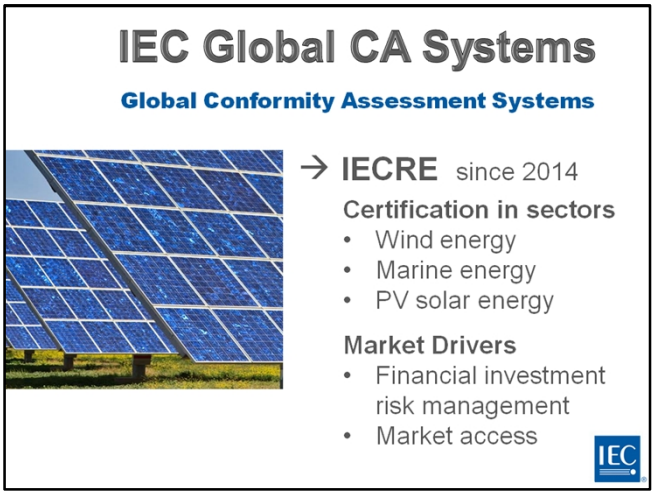
Market Drivers
- Safety
- Risk Management
- Asset management

IECEx – for all verification needs of the Ex industry.
The Ex industry is the explosive atmospheres industry.

IECQ – this is serving mainly business to business interests, but with a trickle down effect for consumers. It covers electronic components, supply chain, supplier qualification, hazardous substances process management and more.

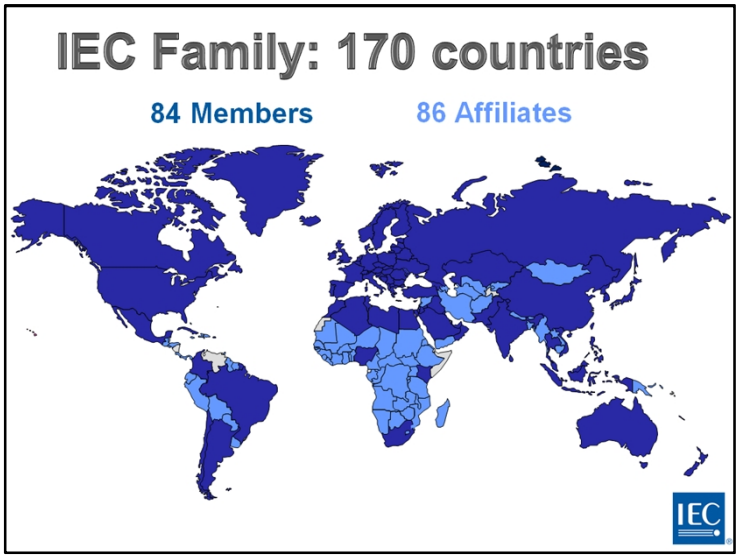
It's newest scheme, for LED Lighting, was requested by the LED lighting industry because their products were not initially living up to their claims of long life, and were therefore not providing the energy savings and life time cost savings, as advertised.

The LED lighting industry requested the IECQ to help them improve the quality, reliability and endurance of their products and therefore to realise the promise of LED lighting and raise the industries reputation.



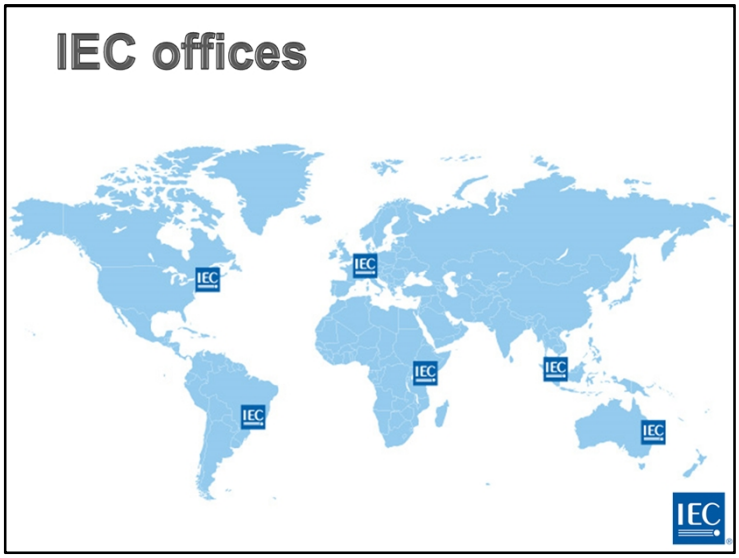
and
IECRE – which is our most recent new conformity assessment system,
for renewable energy in the wind energy, marine energy and PV solar energy sectors.

It was established in 2014 and began issuing certificates this year.



Today IEC is a family of 170 countries.

With Syria and Liberia having joined as Affiliates in 2016.



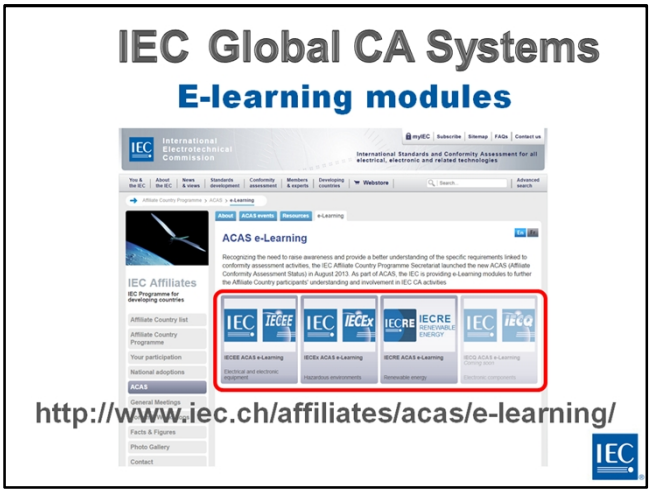
IEC was established in 1906 and today has regional offices in North and South America, in Africa, in Asia and Australia, and has its Central Office in Geneva.

The African office in Nairobi, Kenya, was inaugurated in 2015.

IEC provides assistance to developing countries through its ACAS programme.
ACAS means Affiliate Country Conformity Assessment Status.

Two ACAS events were held this year the first in April in Azerbaijan, with EASC (Eurasian Interstate Council for standardization, metrology & certification), and the second in November in Costa Rica, with COPANT and PTB.

ACAS also provides training opportunities through its e-learning program.



The e-learning modules are part of the Affiliate Conformity Assessment Status, or ACAS, training program, but are also open to anyone who is interested.

The e-learning modules a are on three levels, with a quiz to access the top level
and a quiz at the end of the top level to receive a recognition of achievement from the IEC.

Currently there are about 140 registered participants from 10 countries at various stages in the e-learning program,
and the first recognition of achievement was issued to a participant from Ecuador in October.

IEC is active with many international organizations.

Currently IEC is working with ITU to develop a global interoperability certification scheme based on testing to ITU recommendations.

IEC is also acting as an advisor to the OIML for their newly proposed CA Scheme.

IEC is also a partner with ISO in the development of the ISO CASCO toolbox of standards, or more correctly named, the ISO/IEC 17000 series.

And of course IEC works with the World Trade Organizations and with the UNECE and especially Working Party 6

Thank you
David Hanlon
IEC Secretary of the Conformity Assessment Board
UNECE WP 6
2nd December 2016
Geneva
IEC
INTERNATIONAL ELECTROTECHNICAL COMMISSION