



# The IECEE Global Motor Energy Efficiency Programme

---

---

## Introduction

Electric motors driving pumps, fans, compressors and other machines are responsible for 45% of global electricity use. Through higher efficiency of motors and the use of optimized motor systems, electricity savings of 20% to 30% can be achieved.<sup>1</sup>

Many countries have established mandatory Minimum Energy Performance Standards (MEPS) for electric motors with efficiency requirements. Over time, several other countries are likely to introduce MEPS for motors as well, and their respective MEPS are becoming more and more stringent. While MEPS are now most often based on the motor efficiency classification in IEC 60034-30-1 and the efficiency test method IEC 60034-2-1, the process and requirements for certification and compliance vary greatly from country to country, including test standards, laboratory accreditation, sampling, test process and labelling.

Electric motors and their driven equipment are being manufactured in and shipped across many countries worldwide to satisfy global demand. Differences in



national regulations and customs import requirements create technical barriers to trade. In addition, the lack of effective enforcement of MEPS and verification processes weaken the trust in motor markets and quality products.

### A globally harmonized programme

—  
The IECEE<sup>2</sup> is launching the new Global Motor Energy Efficiency Programme (GMEE), to address the many trade barriers due to

these differing country regulations for motor efficiency, and to attempt to set up a globally harmonized and applicable programme.

#### The GMEE programme is developed on a strong foundation:

- one recognized motor efficiency test method (IEC 60034-2-1)
- one test report format
- common certification process based on the international IECEE CB Scheme



<sup>1</sup> Paul Waide, Conrad U. Brunner, et al.: Energy-Efficiency Policy Opportunities for Electric Motor-Driven Systems, IEA Working Paper, 2011, Paris.

<sup>2</sup> IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components: [www.iecee.org](http://www.iecee.org)

**Based on the IECEE Certification Body (CB) Scheme**

GMEE is based on the IECEE Certification Body (CB) Scheme. The Scheme is based on IEC International Standards, and may also account for national differences to these Standards. The main objective of the Scheme is to realize the concept of “one product, one test, one certificate” through promoting the harmonization of national standards with International Standards. The IECEE has more than 50 Member countries,

nearly 80 participating National Certification Bodies (NCBs) and close to 500 CB Testing Laboratories (CBTLs). National Certification Bodies are assessed on site to verify their compliance against ISO/IEC 17065 and the IECEE Basic Rules, Rules of Procedures and Operational Documents.

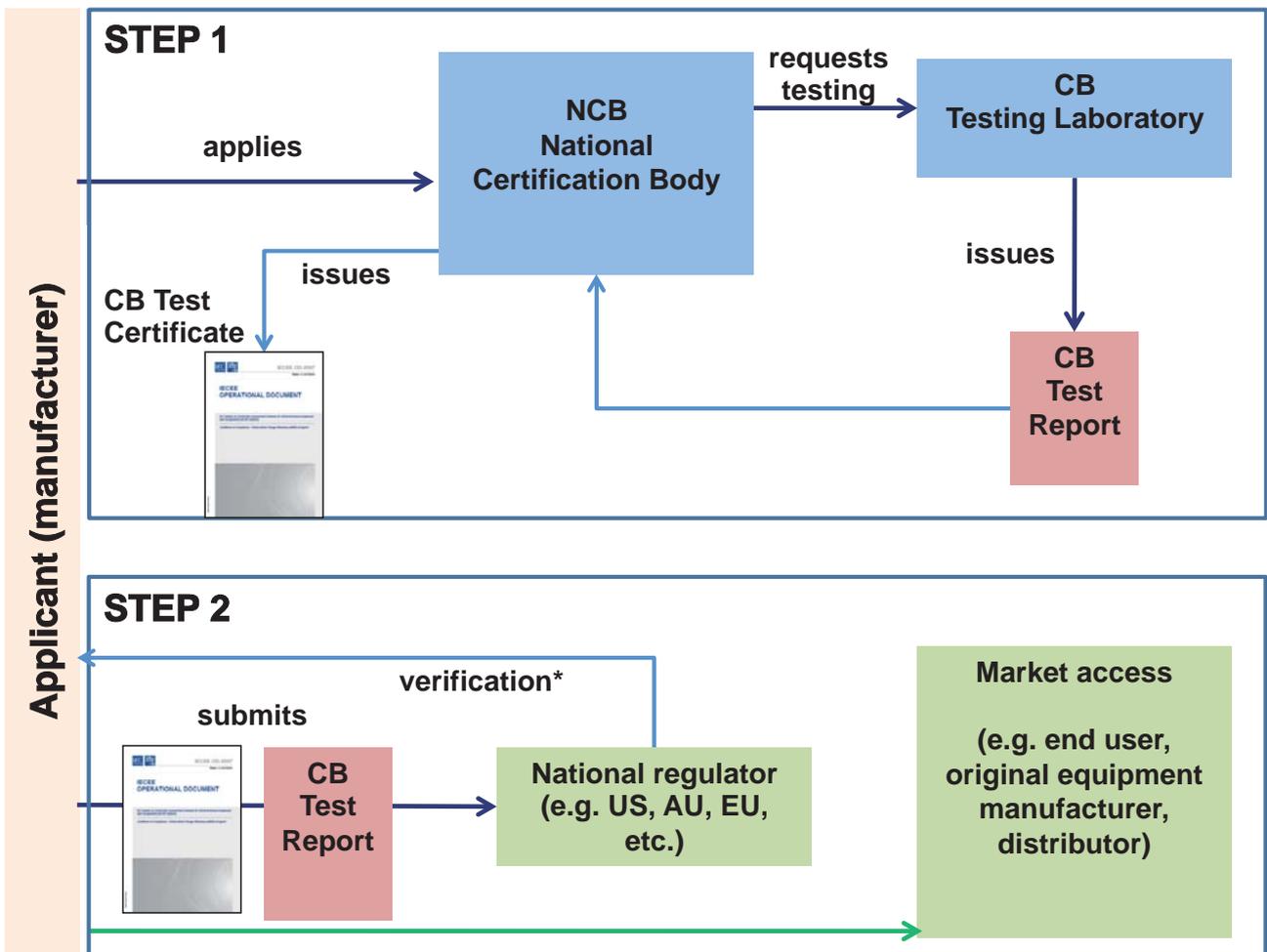
This assessment follows the peer assessment process manned by teams composed of other NCBs to ensure that each Member NCB has the necessary technical capability, competence and

experience. CBTLs are similarly peer assessed for compliance with ISO/IEC 17025 as well as the IECEE Basic Rules, Rules of Procedures and Operational Documents.

Figure 1 illustrates the process for obtaining national certification for a GMEE product.

The GMEE Operational Document (OD-2057) was approved by the management committee of the IECEE in June 2015.

**Figure 1 – Process for obtaining GMEE national certification under the IECEE CB Scheme**



\* may require national compliance marks



IEC System of Conformity  
Assessment Schemes  
for Electrotechnical Equipment  
and Components



3 rue de Varembe  
PO Box 131  
CH-1211 Geneva 20  
Switzerland

T +41 22 919 0211  
secretariat@iecee.org  
www.iecee.org