



21-22 July 2011

Kuala Lumpur Convention Centre (KLCC), Malaysia

ENHANCING ELECTRICAL SAFETY AND COMPETENCY PRACTICES IN INDUSTRY

Presented By

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Organized by:



21-22 July 2011, KLCC

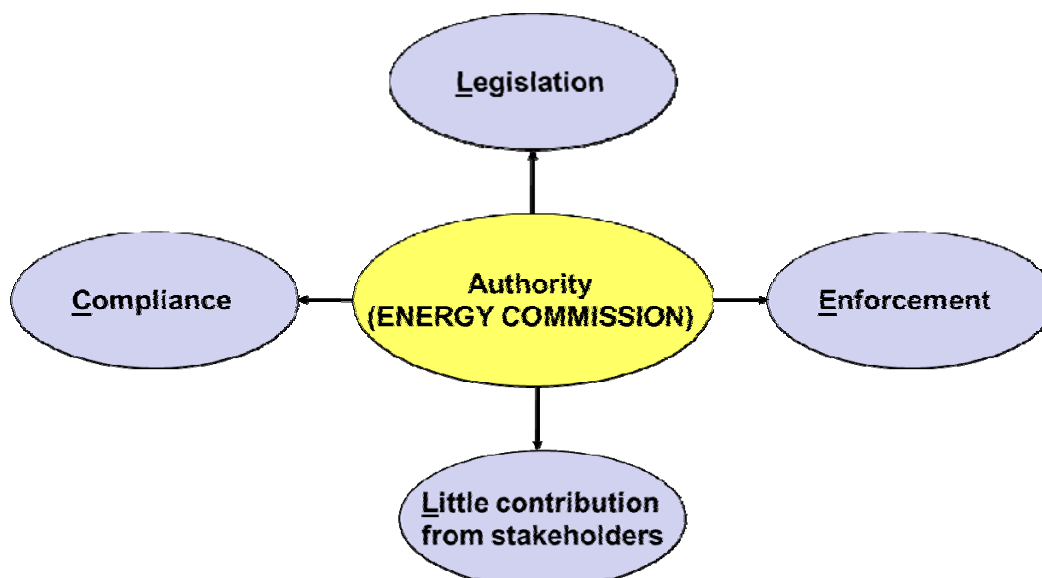
BRIEF HISTORY OF SAFETY AND COMPETENCY LEGISLATION

- Legislation on safety and competency initially were through state enactments mostly in Perak and Selangor to mining, plantation and relevant industries.
- Records indicate initial legislation on boilers were as early as 1890 and for electrical well before 1914.
- Federal Laws on electrical came into force through The Electricity Ordinance 1949 and The Electricity Regulation 1951.
- Legislation in safety and competency in this country is well established and is in great detail. Changes have been made to ensure such laws remain relevant to the changing environment.

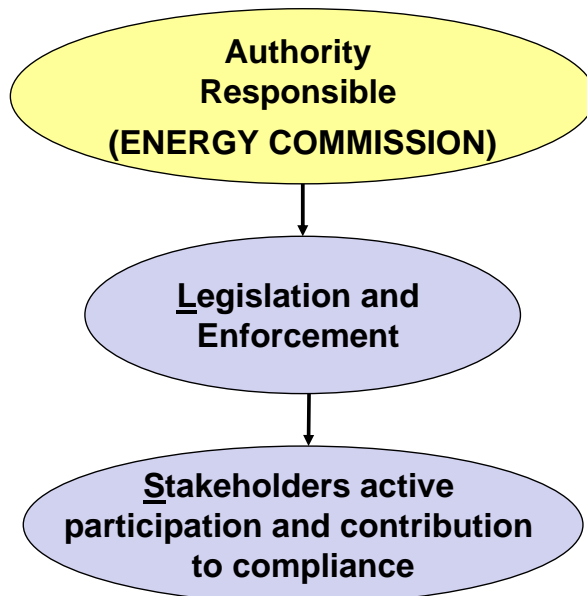
BRIEF HISTORY OF SAFETY AND COMPETENCY LEGISLATION

- Mining, plantation and relevant activities together with the initial “Independent Power Producers” (IPP’s) was the first wave for industrial development in this country.
- Manufacturing industries commencing in the 1960’s is in fact the second wave of industrial development.
- Malaysia is therefore fortunate in having well defined laws on safety, health, welfare, competent control and well trained manpower available when the second wave of industrial development started in this country, an advantage many Afro-Asian countries lacked.

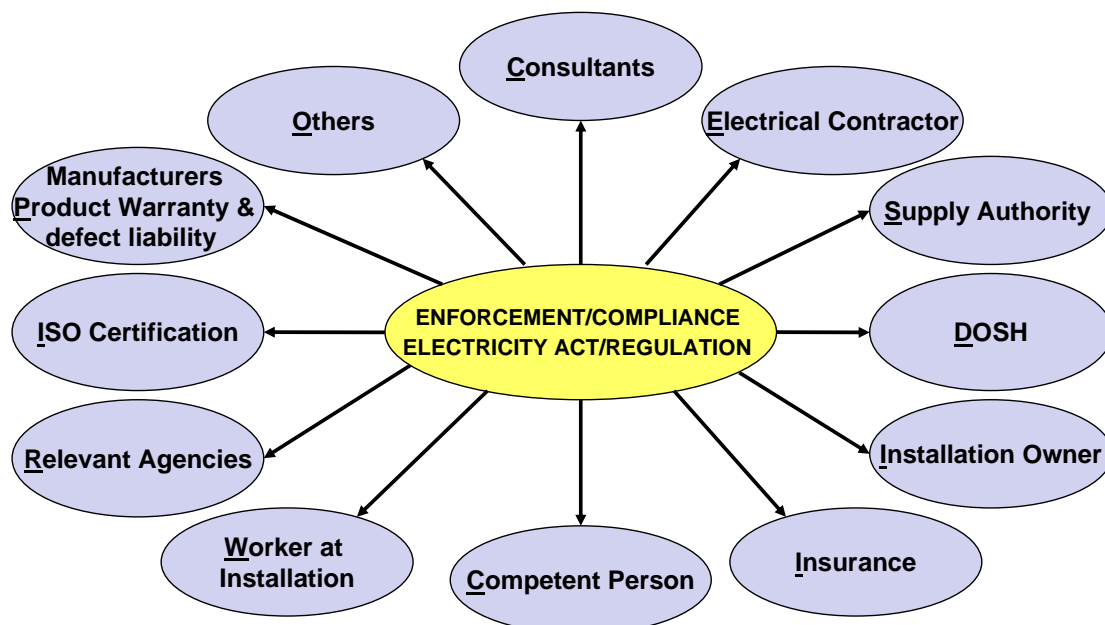
APPROACH IN SAFETY AND COMPETENCY CONTROL IN UNDERDEVELOPED AND NEWLY DEVELOPING COUNTRIES



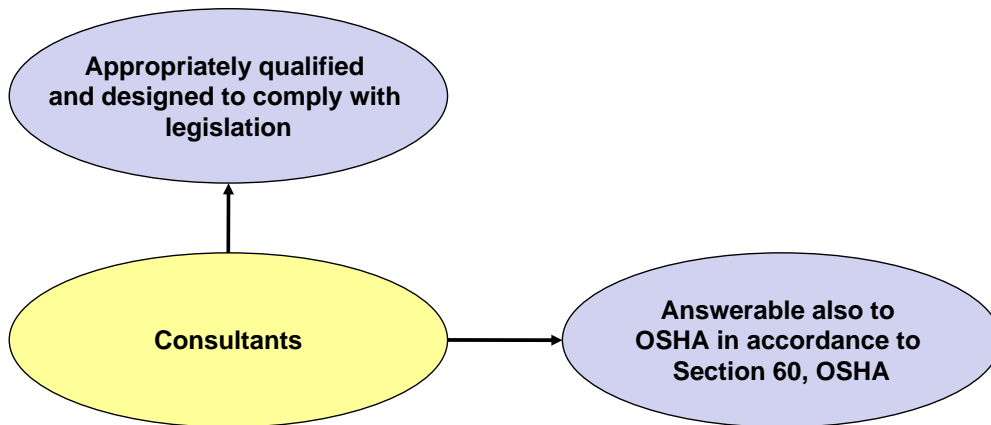
APPROACH IN DEVELOPED COUNTRIES



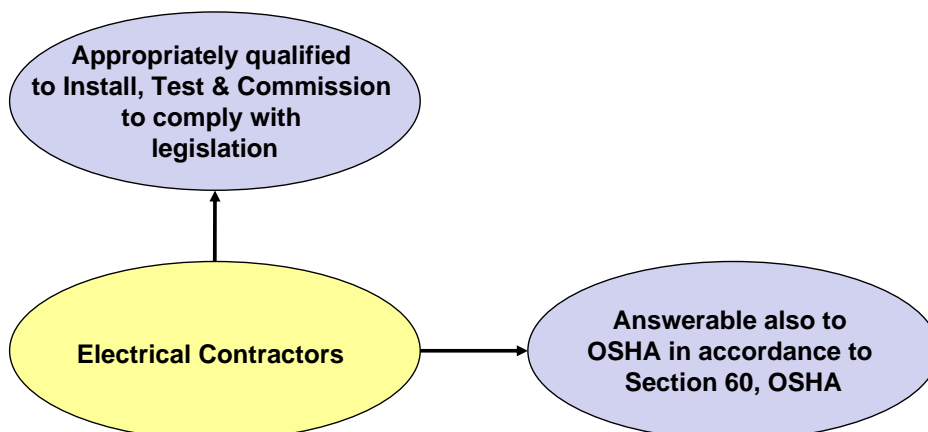
ROLE OF STAKEHOLDERS IN ENFORCEMENT & COMPLIANCE



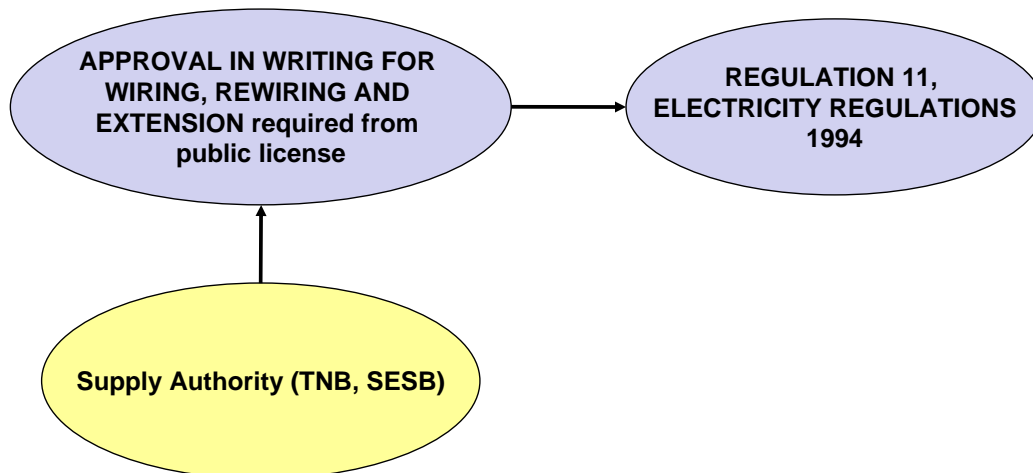
ROLE OF CONSULTANTS IN ENHANCING ELECTRICAL SAFETY



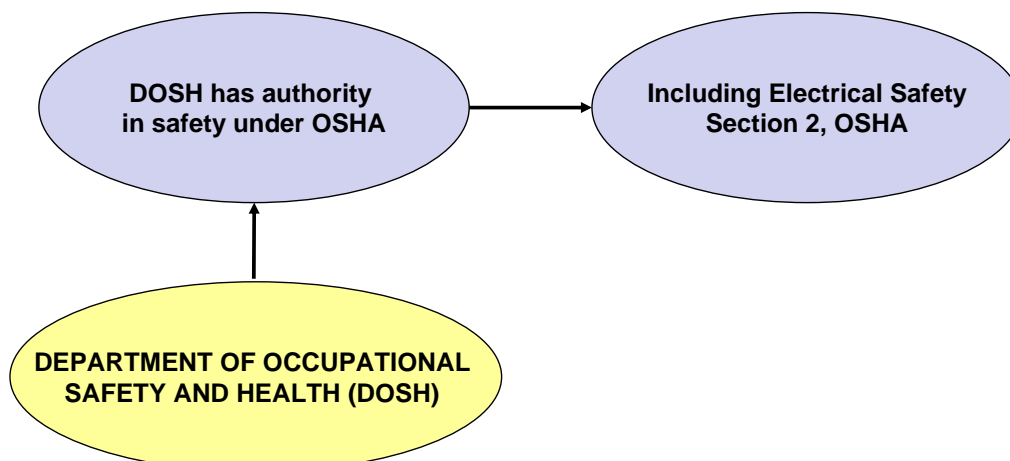
ROLE OF ELECTRICAL CONTRACTORS IN ENHANCING ELECTRICAL SAFETY



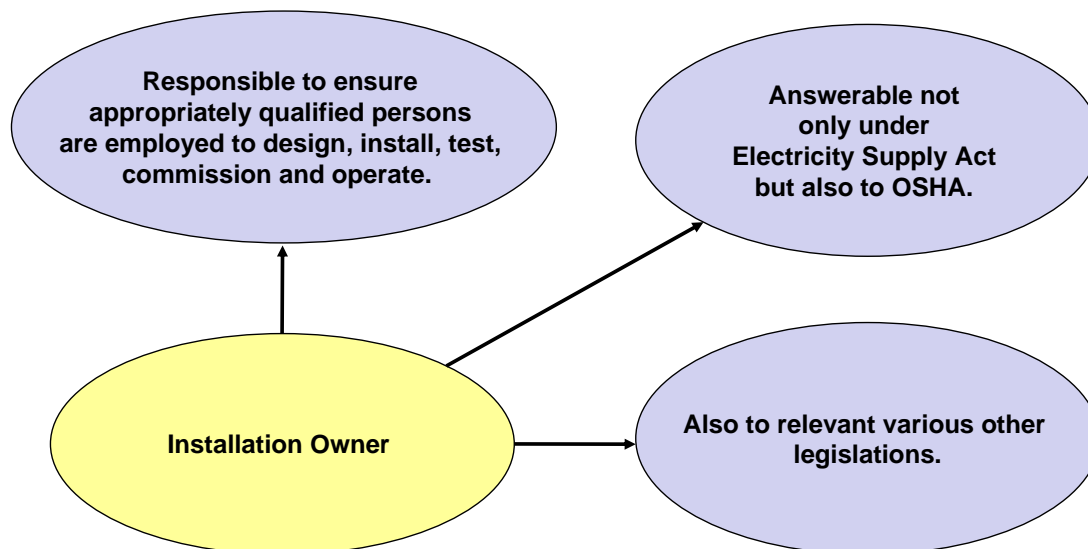
ROLE OF SUPPLY AUTHORITY IN ENHANCING ELECTRICAL SAFETY



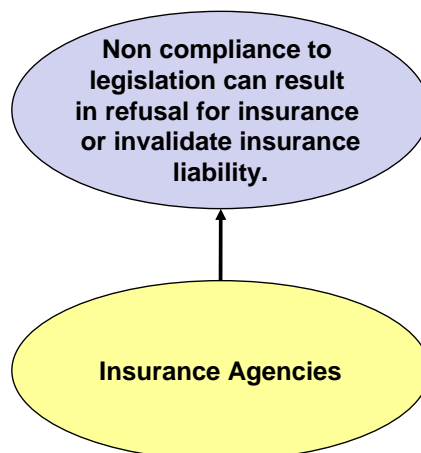
ROLE AND AUTHORITY OF DEPARTMENT OF OCCUPATIONAL SAFETY AND HEALTH (DOSH) IN ENHANCING ELECTRICAL SAFETY



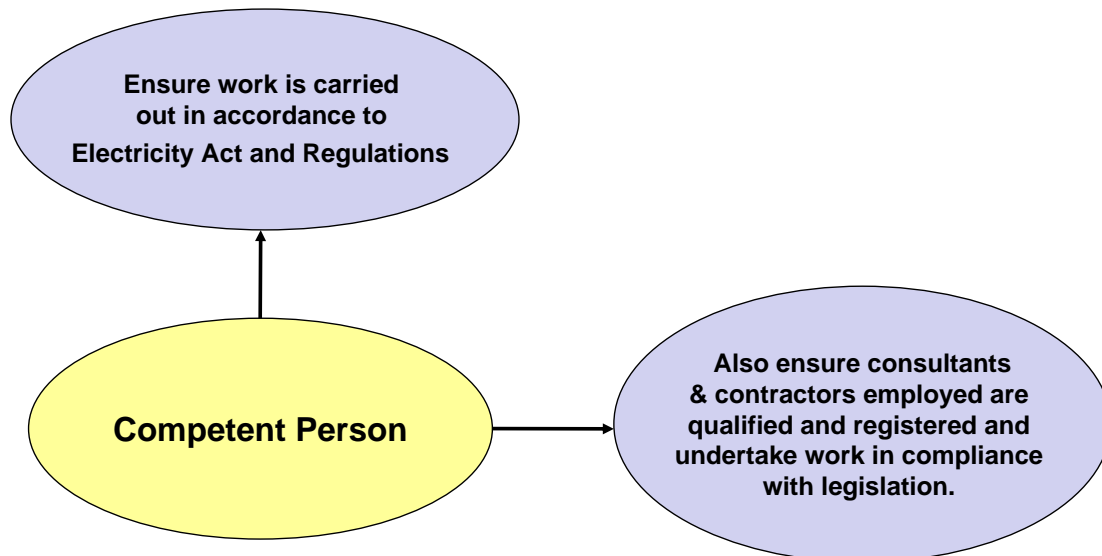
RESPONSIBILITIES OF INSTALLATION OWNER IN ENHANCING ELECTRICAL SAFETY



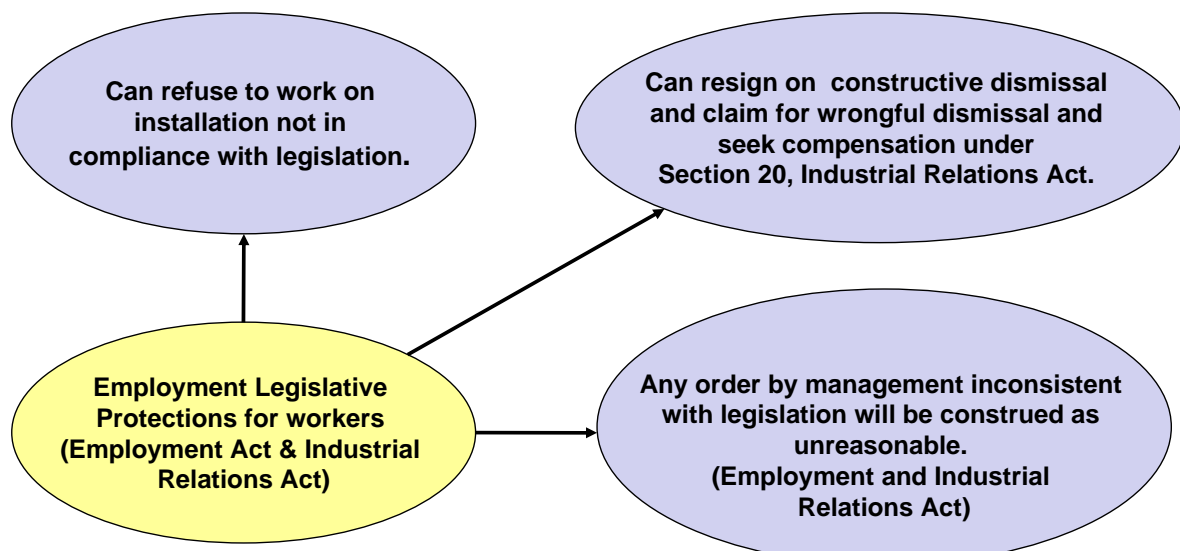
CONTRIBUTION OF INSURANCE AGENCIES IN ENHANCING ELECTRICAL SAFETY & COMPETENCY CONTROL



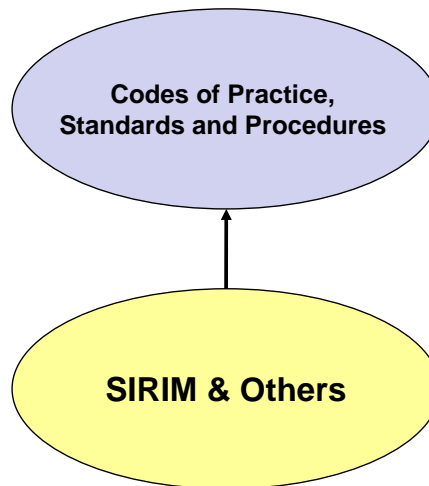
ROLE OF COMPETENT PERSON IN ENHANCING ELECTRICAL SAFETY



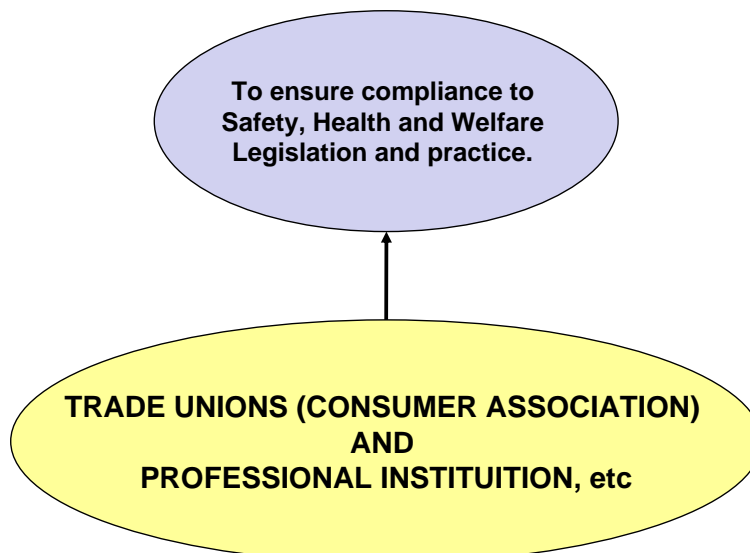
RIGHT OF WORKERS AT INSTALLATION WHICH CAN CONTRIBUTE TO ELECTRICAL SAFETY



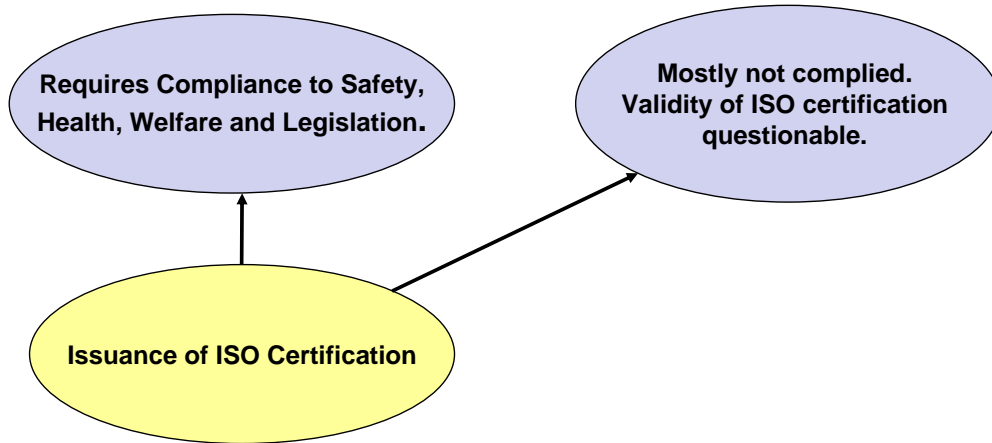
CONTRIBUTION OF AGENCIES TO ELECTRICAL SAFETY



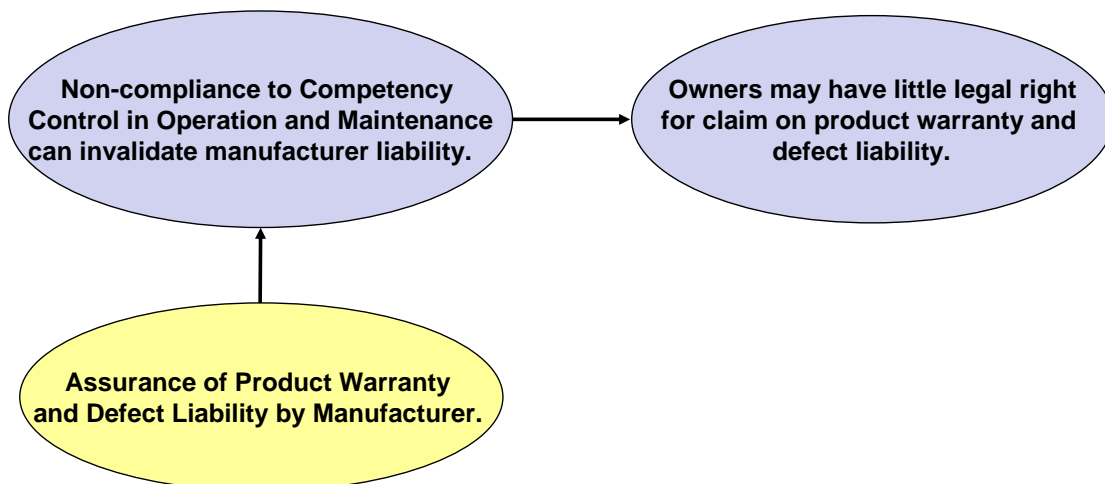
CONTRIBUTION OF NGOs TO ELECTRICAL SAFETY



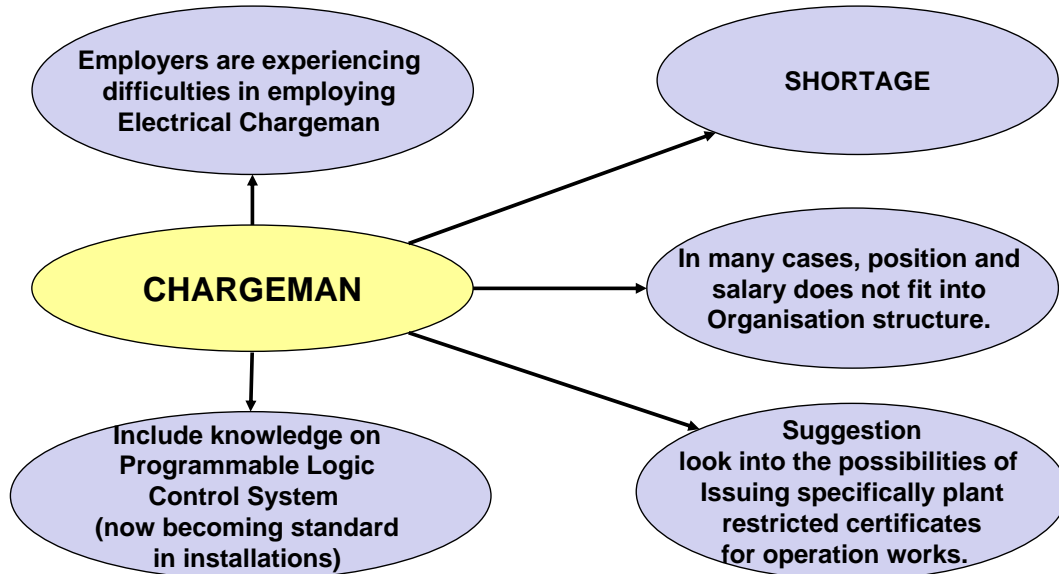
ISO CERTIFICATION AND NON COMPLIANCE TO SAFETY & COMPETENCY LEGISLATION



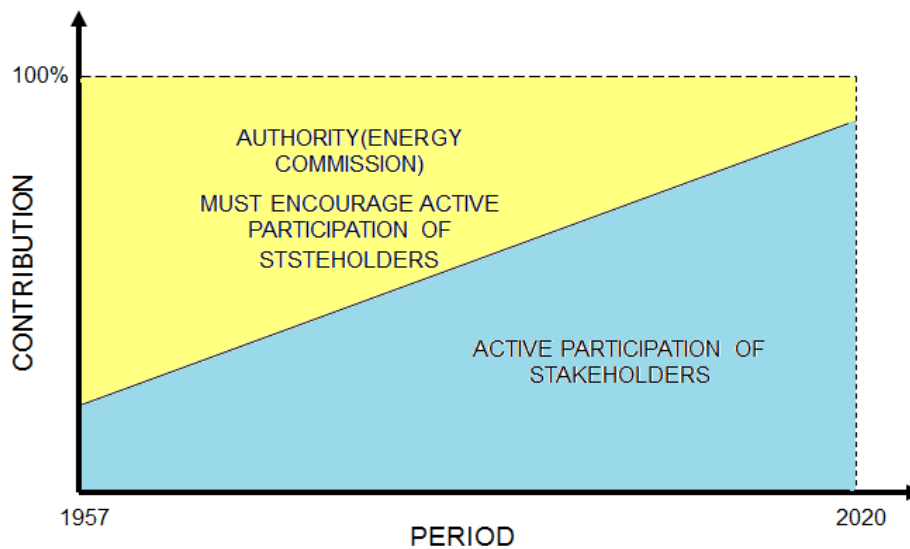
OBLIGATION OF OWNERS TO COMPLY WITH REQUIREMENT FOR PRODUCT WARRANTY AND DEFECT LIABILITY



ELECTRICAL CHARGEMAN & INDUSTRY



STATUS AND ACTION TO ENSURE COMPLIANCE TO STATUORY REQUIREMENTS BY 2020 – MALAYSIA AS A DEVELOPED NATION



CONFLICTING PROVISIONS

- There are provisions within the Electricity Regulations 1994 which can and has led to conflicting interpretation.
- There are also conflicting requirements, since change of prime movers from steam engines to electric motors, of the Factories and Machinery (Persons in-charge Regulations) which need to be reviewed to ensure compliance with competency control and safety legislation.
- The above conflicting provisions will affect implementation of the new Renewable Energy Act 2011 simply because biomass, biogas projects involve systems, plant and equipment coming under the Electricity Supply Act and the Factories and Machinery Act. This will have to be resolved.
- ICEM has and will take up this matter with the relevant authorities to enable effective compliance.

ENERGY MANAGEMENT AND SAFETY

- Competency control is about safety, reliability and energy efficiency management of the system, plant or equipment.
- Energy Management activities can interfere with safety.
- Energy Management must therefore remain the responsibility of those responsible for the design, installation, operation and maintenance of the system, plant and equipment.
- ASEAN Energy Management Scheme (AEMAS) agreed upon at the ASEAN Ministerial meeting in Phnom Penh in June 2005 allows for all stakeholders to be involved in Energy Management. Hopefully AEMAS will be implemented soon.
- Hopefully the AEMAS will be adopted for implementation soon.

CONCLUSION

- Energy Commission and competent persons cannot, acting in isolation, enhance electrical safety and competency practices in industry without the active participation and support of all relevant stakeholders.
- This is the approach adopted in Developed Nations, NGOs play a positive role.
- This approach will lead to less legislation , more codes of practice and standards in the management of safety, health, welfare and competency control and thus less direct enforcement process..
- The process of change must take into account the administrative and financial liability that industries will have to encounter. This change must be managed through structured approach – conduct workshops and seminars for stakeholders. Conflicting legislations must be amended.
- We cared for competency - safety, reliability and efficiency since 1890 and 1935 respectively – well before some so called now advanced countries.
- Active participation of stakeholders is **CRITICAL** to enhance safety.