

APEC Workshop Renewable energy

Q1: Priority issues in measurement

- Emphasis shifting from power generation to transmission and distribution
- Measurement problems exist in sensor installations as well as applications
- Key industry concern is for cost-effective measurement capabilities with low uncertainty
- Need for research in more efficient rechargeable batteries
- Target industries with heavy energy consumption with focus on GHG
- Encourage economies without standards to trace directly or indirectly to those with primary standards until increased demand; then develop primary capabilities as next stage
- Increase uptake of LEDs through APEC economies.

Q2: Policy/regulatory drivers

- Australia encourages industrial self-regulation for early stage product development
- Singapore incentivises industry through certification marks to demonstrate energy efficiency
- Japan prioritized RE in national agenda after Fukushima
- Thailand looks for international references to fill regulatory gaps
- Germany sees the trend towards more practical applications
- USA is determined to reduce standardization difficulties resulting from the variety of LED lamps.

Q3: Experiences and lessons in collaboration

- NMIA seminar on LEDs on 4 May 2016
- A*Star partnerships with national standardization organizations and industry attachments
- Suggest strengthening APMP-APLAC collaboration with PT programs to involve testing laboratories
- EMPIR: open to self-funded collaboration outside Europe
- EMPIR researcher mobility programs
- CIE provided UNEP-funded training education to 20+ engineers (April 2015) and continue in the future (e.g. Nov 2015)
- Thailand metrology clubs to partner with industry

Action plan

- Workshop in Asia-Pacific proposed for mid-2016 under APMP energy-efficiency working group
 - Form small working group to develop workshop concept
 - Importance of involving calibration labs
- APEC workshop to bring together scientists, regulators, standardizers, and policy makers
- Funding of scientist secondments
- Running of comparisons and PTs
- Lifetime of energy products to be tested in different environmental conditions
- Provide systemic calibration solutions for a highly integrated product and application chain.