

Measurement group discussion

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CCAC Workshop
7-8 September, 2016
Vancouver, BC, Canada

The logo for the International Council on Clean Transportation (icct). It features the lowercase letters 'icct' in a bold, dark blue font. The letter 'i' has a small blue circle above it. Below the letters, the full name 'THE INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION' is written in a smaller, all-caps, dark blue font.

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Reminder of Workshop Goals

1. Solidify recommendations for marine **BC measurement approaches**
2. Identify effective technological and operational **strategies to control BC** from marine engines

Breakout section takeaways: Measuring Marine BC

- Our goal: Measure to control at source.
- We should focus measurement approaches first on a test stand e.g. engines. On-board measurement will be important for conformity test, compliance etc.
- Cannot recommend ambient measurement techniques (MAAP, aethalometer) as fit for purpose. Also concerns about the use of EC/OC.
- More work to specify instrumentation parameters used to collect data (e.g. PAS wavelength used, FSN instrument generation) would be helpful.
- ***More qualitative detail on the experience of using different measurement approaches and their limitations would be helpful. This could inform the development of a future measurement standard.***

Breakout section takeaways: Measuring Marine BC

- Reporting protocol is great starting point, but need to develop a recommended measurement method and then a uniform standard. Neither is IMO's job.
- Ad hoc technical committee can play this role. Unlikely to see IMO recognize an external process formally but ICCT may be able to continue facilitating role.
- Existing reporting protocol is great, detailed project reports should also be written and ideally data collated and made available to interested parties.
- ***More thought needed on how the ad hoc group might prioritize standardizing the measurement reporting protocol.***